THE CULTIVATOR.

"TO IMPROVE THE SOIL AND THE MIND."

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Agriculture—Its Labors, its Profits, its Pleasures.

THERE are some questions in relation to agriculture that are of vital interest to us as practical farmers. In these days of struggling for wealth and honors, and in these days, too, of striving for making money in the easiest way, questions like the following come to us from many quarters. Is the profit of agriculture at all adequate to its labor? Is not agriculture a life of incessant toil? Of all trades and occupations, is it not the poorest investment for capital?

In a former communication for the Cultivator, I simply glanced at the subject; I wish now to consider it a little more in detail. The questions must be met and answered, and they must be answered fairly, too. It will not do to quote one or two instances where men have been particularly favored, and have acquired property by agricultural pursuits. It is with agriculture as a business, a calling, that we have now to do. I say the questions must be answered, and fairly answered, and the answer to them is a matter of vital interest to us as practical farmers.

Many young men are yearly leaving their fathers and going to the large cities to seek employment. Some become clerks in stores, others become cartmen, some become one thing, some another; all however, under the fixed apprehension that anything is better than agriculture, that everything pays a better profit. If it can be proved that everything is more profitable than agriculture, that it is a calling scarce worth following, and in fact only followed either by rich men for their amusement and pleasure, or by those who have been brought up to the business, and who cannot get out of it—then indeed have we found a mystery. What is it but this—that agriculture, the most ancient, the most honorable of all occupations—the main spring of trade, commerce, and of all other occupations,—the source from which all the other callings derive their support—that this, I say, is worthless. But if, on the contrary, it can be shown that the complaint is ill founded, something at least for the honor of agriculture will be achieved. I wish, then, in this article, to consider its labors, its profits, its pleasures. First, then,

ITS LABORS.—Mankind are ever prone to find fault with the occupation which they have chosen, or into which circumstance have called them. It is by no means wonderful that some farmers should complain of their lot; if they did not, it would show a superiority in their calling above all others. Who has not heard the doctor complain of the hardship of his lot, the lawyer of his, the merchant of his, and men of all other occupations and trades of theirs. Now it is no doubt true that the labor of the farmer is severe. He must make hay when the sun shines. He must plow and hoe through the long summer day. His sweaty brow, his sun-burnt cheek, betoken him a man of toil, but his rugged countenance betokens, too, that his toil is healthy. His face bears not the care worn look of the doctor, anxious for the fate of his patients; or the lawyer, studying patiently and laboriously the cause he is about to try; or yet the merchant, plodding over his account-books. The farmer's toil is hard, but when night comes, he can lie down in calm repose and rest from his labors, while nature is carrying on the process of growth among his crops. The farmer's toil is hard, but we may hope from present appearances that much of the severe physical labor to which he has been subjected, may be ameliorated by the invention of labor-saving machinery.

THE PROFITS OF AGRICULTURE.—Is it at all adequate to its labor? I think it is. I think that all other things being equal, agriculture can be made to pay as good an interest as any other legitimate occupation. It is an axiom of trade and business, that the greater the risk, the greater the profit. Now, agriculture is truly a legitimate business—it is a choice which a man makes from among the various branches of social occupations as to which way he will obtain a livelihood. Any man, therefore, who enters into the pursuit of agriculture as a matter of *speculation*, will be very apt to be disappointed; but if he enter into it and is qualified for his business, I think he cannot fail of making a compensation for his labors. Things, I believe, are more evenly balanced than men are willing at first sight to admit. Now I do not claim that the profits of the farmer are as large as the profits of the merchant. I do not know whether they ever will be—there are many things in the way which forbid it. In the first place, the risk of the farmer is not by any means as great as the risk of the merchant, and according to the axiom of trade we have mentioned he cannot look for as large profits.

But again, there are facilities connected with the *credit system* which belong solely to the merchant and trader, which the farmer cannot, with safety, avail himself of. A merchant with a capital of five thousand dollars, often trades to the amount of twenty thousand dollars; sometimes to a much greater amount. Some singular developements of the *abuse* of the credit system came to light during the panic of 1837, in the city of New-York. Men with little or no capital, failed for immense amounts. Perhaps some one may say, "well, if my capital of $5,000 gives me the opportunity of trading to the amount of $20,000, I am better off in business, and can make more by my business than the farmer can, with the same amount of actual capital which I possess." I would reply to that—yes: so you can, but if you think it both safe and honest, it is more than I do. You run a great risk and get a good profit; so long

as times are good and business prosperous, you may get along, but let a *panic* come, and then what? Not only are you almost certain of failing yourself, but in your downfall you make others suffer with you —you are, in fact, living and doing business on other men's money. It is computed as a moderate calculation that 80 to 85 business men out of 100, fail during a period of 25 years. This thing alone, to any man sensitive to debt, would render him cautious about entering the arena of trade.

From the remark above made, I hope no one will think that I oppose a just and lawful *use* of credit—this is well and good—it is the *abuse* and not the *use* of it, that I would censure. A man may trade and do business to once, twice, and even thrice the amount of his capital, and yet do a safe business, but when he attempts, on a small capital, to do a business unauthorised by that capital, I say then it is not morally honest. Many men make more money than the farmer, but we cannot always measure the amount of actual profit by this alone; for those who make the most, are of necessity obliged to spend the most. Thus the merchant, doing a large business at home and abroad, is of necessity compelled to entertain largely. His profits are doubtless sometimes large, but his losses are often heavy, and his expenses great. His style of living, too, must be somewhat in accordance with his business. Let no man say that this matter is optional, that the merchant *need* not do it—he *must* do it. It is to a great extent by his courtesy and hospitality, and magnificent entertainments, that he *obtains* his business.

The profits of the farmer may be slow, but they are sure, and we entertain a hope that with more knowledge, they will be more rapid and still remain sure. But before we consent to call the profits of the farmer less than those of many other occupations, let us examine a little further into the matter. Take, for example, the mechanic; do his wages enable him to get rich in a little while? So of the doctor and the lawyer; years of toil and study must first be passed through, before they can arrive at great profit or eminence in their professions. If the young farmer leaves his father's farm for the sake of the *profits* attending a clerkship in some large city, we think he will be mistaken, for it is not long ago that meetings were held in the city of New-York, among the clerks, with a view to better their condition, and it was stated as a fact, at some of those meetings, that the average wages of clerks was not equal to those of day laborers; and upon these wages they were obliged to live and make a respectable appearance; and I feel warranted in saying that things are no better now. Here and there a clerk with fine business talents may rise to eminence under favorable circumstances, but as a general thing, the rising of a clerk is like promotion in the army and navy, *very slow*.

The profits of the farmer may appear slow; but look at the facts in many cases; see how many farmers are laboring under heavy debt. Small means and a heavy debt, would be a great drawback in any business; but yet the industrious and enterprising farmer is not dismayed at it; through difficulties, through trials he presses onward and in most cases wins the victory. It must be an occupation worth following that can enable a man to do this. But with the farmer, it is not only the actual profit he derives, for if he is a good manager his farm is always increasing in value, and this is a continual profit to him. Many instances can be shown in almost all sections of the country, where men who began farming with very little means, are now quite comfortably off. If, then, farming has been made a source of profit in days gone by, may we not hope when the light of science shall be brought to aid practical experience, that the profits of the farmer will be increased according to the intelligence and experience which he brings to his vocation. If the farmer would make his calling profitable, he must learn to think—to work with his head as well as with his hands. The same system of farming will not answer for all parts of our widely-extended country. In one section it may be most profitable to grow wheat, in another corn, in another to raise stock, in another to keep cows, in another to sell hay and buy manure; in almost all to combine with farming the growing of fruit. About these things and a hundred others, the farmer must use his own judgment, and in each and all, must take care not to be wedded too much to the opinions of his fathers, for since their day, things have changed; railroads, canals, steamboats have brought the far off places of the West in close communication with the seaboard, and we, who occupy soils worn by the culture of long years, must redouble our vigilance, if we would compete favorably with our western friends. Above all things, let us never despair. If we think that other men in other callings are making more money than we are, let us be satisfied with our lot, when we think that our calling is less harrassing, and in general far happier. But we must take care and not be deceived by appearances, for when we examine the matter closely, we will find that gold and silver are not accumulated very fast at the present day, in any ordinary business.

I have spoken of the toil and the profits of agriculture. I cannot leave the subject without, for a few moments, turning to its PLEASURES. My farmer friends, I cannot but feel that few of us esteem our noble calling as we ought. With many it is a life of ceaseless and unending toil, no higher aim or object is seen in it, save to plow, to sow, to reap, to "do business and get gain;" so that the dollar be made, no matter whether the soul is buried beneath the body's toil or not. Lost in its toil, we think not that it has a pleasure. But let us pause a moment and look around us; there are things that come to us in the way of our business, that to other men, in other occupations, would be looked upon as luxuries. It is in the power of every farmer to have a good garden; from this garden, during the season of vegetables, his table can be supplied at a trifling expense, with the choicest and freshest of them; so too of fruits, apples, pears, peaches, cherries, plums, and a variety of others, all can appear at his social board. During the summer months, the inhabitants of the city fly to the country for health and fine air, whenever opportunity offers; but the farmer and his family, if health and fine air are to be found in the country of his abode, will be sure to possess them. Contrast the pale and sickly appearance of many children inhabiting our large cities, with the rugged and healthy look of our farmers' boys and girls, and tell us if we have not cause of rejoicing. Need I tell you of the many rides you enjoy through the still, sweet summer morn, which to the mechanic or man of trade, would be so welcome? Need I point to the sweet flowers around your dwellings, growing there almost spontaneously, whose perfume greets your senses? Different, ah! different indeed is your abode amid fruits and flowers, to the abode of him who is hemmed in in the busy mart of trade. There is not a busy time or season but hath its joy for us. From the first note of the peepers in the early spring-time, through the flowery summer, the rich and golden autumn, and the social hearth of winter, each and all in their good time, bring to us

cause for rejoicing. What we stand in need of most, are contented hearts and refined minds, to respond to the soft influences of nature that are ever around us. Let us not be so wrapt up in the toil of our life, as to forget the pleasures in our path. H. C. W. *Putnam Valley, N. Y., August*, 1850.

Oriental and Ancient Customs of the Moors and Arabs:

Their rustic habits of rural life—their Plows and modes of Tillage—they are no "book-farmers"—the patriarchal and nomade customs kept up—the women "grinding at the mill," and "gleaning and thrashing" in the fields—the Arab's substitute for railroads, &c.—their grain-pits—"plowing with the heifer," and divers other droll kinds of team—the Arab fond of a roving, pastoral life—concluding with the "Wild Arab Song of Freedom."

TANGIER, June 20, 1850.

L. TUCKER, Esq.—*Dear Sir:* Above I send you a drawing I have made of a Moorish and Arab plow, with a key, descriptive of its various parts, their proportions, &c. Although I have been thus particular in my description, I do not suppose that this plow will be very generally adopted as a model by the American farmers. And yet, in a land so abounding in *tall timber* and *crooked sticks*, such an earth-scratcher may be made very cheap! Should these, or any other motives, induce in any of our Yankee farmers a desire to adopt this very naturally formed implement, they need have no fears of being prosecuted for a breach of patented rights—as I promise to stand between them and all harm, on that score!

It is peculiarly, emphatically and appropriately, the "anti-book farmer's plow." For those who make and use these plows are inexorably averse to anything like agricultural reading, or knowledge, whether it be imparted in the form of books, periodicals, or orally. They read no book but the Koran—and I believe that is not particularly prolific in agricultural knowledge. These people believe that all improvements that have been made since the days of the patriarchs, are shocking innovations. As the primitive fathers "tilled the earth and tended the flocks," so they have been content to do it, and will be henceforth and forever. All innovations upon those time-honored customs, they regard as but the wicked devices of those who would lead the children of "the faithful" astray from their nomade simplicity, into the meshes of the bookmen of modern times. As the women in those days were made to "grind at the mill," and prepare the corn for their lords and masters—so are they now. There is scarcely a Moorish house in this country, or an Arab tent, but contains these symbols of antiquity. And it is but a day or two since, that on taking a ride into the country we saw the Arab women "gleaning in the field, after the reapers," a la mode Ruth and her antedeluvian sisterhood. "Lo she (Ruth) gleaned in the field until evening, and *beat out that she had gleaned;* and it was about an ephah of barley." So, also, we saw the women "beating out" what had been gathered together. In one place we saw about twenty of these nomade damsels, with merry laugh and lively glee, seated on the ground, with loose bundles of barley before them, each taking a handful at a time in one hand, while with the other, they "beat out" the grain with a rough billet of wood, (or "a staff," as it used to be called,) about the size of a common pastry-cook's "rolling pin." The process is thus described by Isaiah, ch. 28: "For the fitches are not threshed with a threshing instrument, neither is a cart-wheel turned about upon the cummin; but the fitches *are beaten out with a staff*, and the cummin with a rod." "Rise and thresh, O daughter of Zion," saith the Prophet Micah. "Rise and thresh, O daughter of the prophet!" exclaims the Moslem task-master to his spouse, on the breaking of morn. This is a famous country for threshing. The women thresh the grain, and the men thresh the women; the Bashaws thresh the men, and the Sultan threshes the Bashaws; and some of the Europeans threaten to thresh the Sultan.

MOORISH PLOW, *taken at Tangier, June 15, 1850.*

A. *Point* of the plow, which is of wrought iron, and 1 foot in length
B. *Beam*, 9 feet long, or 7 feet front of the brace.
C. *Brace*, of wood, about 1½ inches thick, by 4 inches broad.
D. *Mould-boards*, which consist of rough blocks of wood, about 2 inches square, nailed on each side, which, together with the point, which is about 3 inches broad, makes, not a furrow, but a rut or scratch in the ground, some 6 inches broad and 4 to 6 inches deep.
E. The *handle*, which consists of a crooked stick, with a Moor at one end, and a sharp point of iron (A) at the other.
F. A wooden pin, about a foot long, around which a noose or thong is put, and fastened to the belly-yoke.

As they "laded their asses with corn" in the time of Pharaoh, so do they now, as we see here, on the return of every market day. No such innovations as canals, or railroads, or wagon roads, or wheel carriages, are ever suffered to exist here. The mere suggestion of such a thing would startle the natives from their dreamy propriety. But as in the days of Joseph "they (his brethren) lifted up their eyes and looked, and behold, a company of Ishmaelites came from Gilead, with their camels, bearing spicery and balm, and myrrh, going to carry it down to Egypt"—so will you now see these sons of Ishmael, with their camels bearing spicery, and their various products, going to carry it down to some Egyptian mart, or to the best markets of the Empire.

There, too, are the *grain-pits* of the ancients. There are myriads of these scattered over all the the country, about every town, and secreted among the secret recesses of the mountains. In passing through the soco, or market-place, just outside of

this town, you can scarce avoid treading upon these subterranean granaries. In riding out one day, our horse broke through, with one of his hind feet, the covering of one of these pits, and we came very near being in the predicament of poor Joseph, when thrown, by his envious brethren, into a similar pit. They are usually, however, made very secure, and often, in the country, covered over so carefully and privately, and so completely overgrown with grass, as not to be discoverable except by those who have charge of them. This is to prevent surprise or robbery in times of war, insurrections, &c., and also to keep them out of reach of the Emperor's clutches, who is not very backward or scrupulous about helping himself to all the surplus forage he can lay his hands upon. Quantities of grain frequently remain in these pits for years, without sustaining any material injury, although they are generally constructed by simply digging the pit-holes the required size, (something like the way our cisterns are made,) and lining the sides with cement, leaving a small aperture at the top, through which the grain may be passed, and into which a man may enter, as occasion may require. They are made of any required size.

The Moorish *hoe* is a very useful implement, and not quite as uncouth and primitive as the plow. The Moors never use a shovel or spade, nor a wheelbarrow. They use the hoe in all kinds of digging. In excavating a well, or loading manure, &c., they hoe the earth or manure into small baskets and carry it to its place of destination. The hoe resembles somewhat a small, stout spade, in the blade, and has a handle very much like that of a pick-axe.

The first I had seen of the Moorish plow, or plowing, was about the middle of January, 1849, while taking a short ride into the country. The plow was similar to the one shown in the above sketch, and was drawn by a *bull and cow* yoked together! This, thought I, is "plowing with the heifer" in the most literal manner conceivable. I looked intently in the face of the wild *sans culottes* of a mountaineer at the tail of the plow, to see if he did not betray some symtoms of compunctious shame at this desecration and perversion of feminine rights and privileges; but he appeared as stoical and unconcerned and self-complacent, as any person could be, who considers himself strictly within the line of propriety, and of his duty; and the only emotion discernable was that evinced by an additional stab at the poor animals, with the long pointed goad which the Arab flourished in his hand, as if in retaliation at my looks of surprise and pity.

The apology for a *yoke*, consists of a long, rough stick of wood, three or four inches in diameter, placed across the necks of the animals, and projecting far enough on either side, to admit of a thong or strap being fastened to it; this strap, at the other end, is hitched to a cross-bar which passes under the cattle, just back of the fore legs, and is connected in the centre to the wooden pin (F) at the end of the plow-beam, something upon the plan of a neck-yoke of a pair of horses, when hitched to a wagon. The effect of this constraining harness is, to bring the heads of the animals down so low that their noses nearly touch the ground. If they undertake to raise their heads, they are checked by the cross-bar under their bellies. I have seen another kind of yoke, which operates directly the reverse. It is simply a block of wood passing in front of the horns, (to which it is lashed,) with a thong fastened in the centre, and attached to the end of the plow-beam. This draws the heads of the animals into the air, presenting a very ludicrous appearance. I saw a similar contrivance in Spain. The cattle are sometimes driven with rope reins, fastened to the outside horn of each animal.

Horses are never used for plowing. It is considered too degrading an occupation for so noble an animal. But oxen, cows, bulls, mules, donkeys, and camels, are all indiscriminately pressed into the service. Sometimes there may be seen yoked together a donkey with an ox, a bull with a mule, two cows, and a *camel with a donkey!*—all trudging on with as much patient philosophy and indifference as the natives who drive them. And it is said that the wilder of the natives sometimes harness their *wives* to the plow. But this I do not credit, although I have seen them employed in almost every degree of menial drudgery conceivable, from grinding at the mill, and hoeing and delving in the fields, to chopping wood, and carrying it to market on their heads!

In plowing, they merely scratch over the ground, leaving a sort of rut scarcely over four or five inches in diameter, looking as though it had been rooted up by the wild boars, and this they have to do in the winter, after the rains have moistened the earth, as it is so hard and baked in the summer, that it would be difficult penetrating it with even a more potent instrument than their wild-boar-nosed plow. Nearly all, in fact of their general tilling, as well as plowing, is done in the winter. From the first of November to the first of June, is the growing season for all vegetation.

The soil, especially of the vallies and flat lands, is rich, deep, and remarkably fertile, notwithstanding it has been worn for ages without manuring. There seems to be no sub-soil, or hard-pan; but for six or eight feet in depth, the same dark, loamy sand, or rich alluvial, appears to prevail; and it produces fine crops in spite of the slip-shod treatment which it receives. With an enlightened, efficient mode of tillage, this part of Africa might be made one of the most productive portions of the earth. But the natives, especially the Arabs, are too fond of a roving pastoral life, ever to settle down to improve the soil in the slow, patient manner that is requisite to success. And there is but little encouragement to patient industry, if they were not naturally averse to it; for were they to build up thriving and profitable plantations, these would, with all their hard-earned profits, be stripped from them by the harsh and grasping hand of despotism, which seizes upon everything that will minister to its pride and luxury. Hence the sons of the desert and mountains, prefer their wild, roving life—they are the Nimrods—the "mighty hunters," who delight in the chase, and are never more at home than when mounted upon their swift barbs, and sweeping over valley and mountain and sandy plain, in all the wild freedom of nature, and making the mountains reverberate with their wild chanting notes, as they sing:

"Away, away, my barb and I,
As free as wave, as fleet as wind,
We sweep the sands of Araby,
And leave a world of slaves behind.
'Tis mine to range in this wild garb,
Nor e'er feel lonely though alone;
I would not change my Arab barb,
To mount a drowsy Sultan's throne.
Away, away, &c.

"Where the pale stranger dare not come,
Proud o'er my native sands I rove;
An Arab tent my only home,
An Arab maid my only love.
Here freedom dwells without a fear,
Coy to the world she loves the wild;
Who ever brings a fetter here,
To chain the desert's fiery child?
Away, away!" &c.

Well, Mr. Editor, I began with a *plow*, and will

close with a *song*, so that you will have at least a little spice of variety, if nothing more. Perhaps at some other time, I may give you an article on the BARB, or Arab horse. I have a noble and elegant gray Barb, and a beautiful Arab pony, which I design taking to the States with me, in a month or so, as well as a pair of Spanish pigs, a young wild boar, some Spanish fowls, &c. I hope to reach home in time for your State Fair. Yours, truly, T. H. HYATT.

Means for Mental Improvement.*

There is a tongue in every leaf—
A voice in every rill;—
A voice that speaketh everywhere,
In flood and fire, through earth and air!
A tongue that's never still!

FARMERS often complain that they are deficient in education. For this there is no necessity. Let them support and improve good common schools. Let them avail themselves of the other means of mental improvement within their reach, and they will acquire an education adequate for any occasion they will be called to meet; and they will hold an elevation in society held by no other class of men. It is known that they have a large amount of leisure. Let this be spent in the cultivation of their minds: in laying up stores of useful knowledge.

The benefits of the common school have been named. They make a good foundation for any subsequent mental culture. Then let the leisure time of farmers be spent in reading good books, good family newspapers, and studying the topography and statistics of the country. Read no bad books; they are worse than none. Let every family take a weekly secular newspaper; a weekly religious newspaper; and a monthly agricultural paper. Let the families in the same immediate neighborhood—half a dozen or less—act in concert; not all take the same papers, but as many different ones as they can. Let these secular papers come on different days in the week; one Monday, one Tuesday, one Wednesday, and so on, so that a fresh paper will come into the neighborhood every day. Let all exchange these papers with each other, after each has been read by its owner. The religious papers should come the latter part of the week, so that each family have a fresh one for Sunday. Thus, these six families will all have the benefit of six different secular papers, giving them all the important news fresh, with a vast amount of valuable miscellaneous matter—in the course of a few years sufficient to make a little library, were it in volumes. A year of such reading will be of equal value to a family, especially the young members of it, as going to school three months. If paid in advance, as newspapers always should be paid for, the cost will be to each family only about five dollars—equal in value to twenty-five dollars in tuition for going to school.

An objection is at once made that the expense cannot be endured; and possibly that there is no leisure for all this reading. As for the latter, a plump contradiction is interposed. There is time for it, and much besides. The pecuniary means are easily provided. Let every farmer appropriate the produce of half an acre—if he has a large farm, an acre, for literary purposes—for the education and mental improvement of his family. Let it be well tilled, well manured, and planted with potatoes, corn, cabbage, wheat, oats, or whatever will give the best crop. Let it be understood, that the profits are not to be touched for anything else, and you may depend upon it, there will be no neglect in its supervision. No more will a weed be found upon it than upon a Macadam turnpike. The women of the family will watch its growth; the boys will keep their hoes bright as swords and bayonets, in destroying whatever should be removed. The profits on this half acre will certainly be fifteen dollars. Here, then, in a district of six families, will be ninety dollars to be expended in mental culture; five dollars to each family in paying for the periodicals above named, and ten dollars to each for the purchase of interesting and useful books! Let the three hundred agricultural families of a town containing, it may be, from three to four thousand inhabitants—a fair equation—do this, and in ten years, when the children are grown to adult stature, what a change will their society exhibit! Think of it, reader! Make a beginning! The example, under proper inducements, will spread like wildfire.

To encourage an enterprise so pregnant with results, let agricultural societies offer a premium of one hundred dollars to the town within the limits of the society's operation that has, according to its population, the greatest number of these fields devoted to literature; and let each town give a premium of ten, fifteen, or twenty dollars, for the greatest profit on any one of these half acres in that town. Are there no persons in our state and county agricultural societies to make such a movement; and may not individuals in every town be selected to do the same? Let some of the old premiums offered by towns for killing wild cats, wolves, and bears, as that description of gentry so troublesome to our forefathers, has been destroyed, or has prudently removed to other regions, be now offered for making our sons and daughters fit for a residence, six months every year, at the seat of the Federal Government. Nothing is wanted for the effecting this, but the zealous efforts of a few distinguished individuals in every town.

It is not often considered what large results come from a cause in itself frequently very diminutive. Many may, and doubtless will, ridicule the proposition suggested. A case may be named apropos to the scheme here recommended. Nearly fifty years since, a boy of eight or ten years old was known to live in one of the then new townships of our country. Probably there was not a book there, save a small family Bible, here and there Watts' Psalms and Hymns, spelling-books, small arithmetics, and half a dozen or so of Morse's dollar geography. These constituted the literature of the town. This boy was allowed to plant a little patch of potatoes, it may be half an acre. The increase was annually sold at about twenty cents the bushel, and the cash laid by. During this period he accidentally came across the last volume of Josephus in six volumes, belonging to a little social library of two hundred volumes, in an older settlement, ten miles distant. He read that volume with eagerness. The influence upon his mind was incredible. Previously he knew nothing of books save those named. Of a library he had never heard. The importance of this one acquired more value in his mind than a gold mine. He resolved to appropriate a portion of his potato funds for an interest in it. He did so; and weekly, for several years, he continued to take a half day for obtaining a book to read the succeeding week. However, this did not satisfy; he wanted books of his own. His potato funds were used up in the purchase of them. At sixteen he resolved to obtain a public education. This he accomplished; studied a profession; took no small part in promoting the literature of the country; and finally received the highest collegiate honors; the whole of which may

* From Dr. BLAKE's new work "Farmer's Every Day Book."

be referred back to the products of a little potato patch applied to mental improvement.

Although we have given a prompt denial to the excuse for a neglect of reading and study, that there is a deficiency of leisure time, yet we propose here to examine it more minutely. It is admitted that to those who have not examined it carefully, there may appear to be some plausibility in it. Truly, in the summer season, especially, and during the hours of daylight in the winter, farmers may always find something to do. Allusions are elsewhere made, on the one hand, to the constancy of rural occupation, and on the other hand, to the opportunities of persons thus occupied for ample intellectual culture. As the subject is of vast importance, a few paragraphs may well be devoted, to a better comprehension of the nature of these opportunities. They will be found far more numerous and ample than is supposed. The experience of hundreds and of thousands of persons habitually employed in manual labor of some kind or other, is in confirmation of the views here presented. It is too well known to require, in this place, any particular account, of individuals both in this country and elsewhere, who have risen to eminence, having laid the foundation for it in habits of study and reading amidst the most constant applications to mechanical or agricultural occupations. Among these individuals will be recognized those of the first grade of distinction in the learned professions and of political life. Such instances will be more and more frequent as the subject becomes better understood.

The evenings, themselves, afford an average of three hours each for one half of the year. This, in the thirty-five years between the age of fifteen and fifty, is sufficient, if properly applied, for the acquisition of more knowledge from books and study, than is ordinarily acquired during a course of classical and professional study in our best public institutions. Three hours a day, for six months, Sundays excepted, will be four hundred and fifty hours; and this multiplied by thirty-five, the number of years supposed, will be fifteen thousand seven hundred and fifty hours. Now if we suppose a course of classical and professional study in our public institutions to embrace a period of eight years—four in college, and four besides; and, that each individual is occupied eight hours a day, for two hundred and twenty-five days, each year, the rest of the time being Sundays and vacations, the entire period of his study in the eight years, will be fourteen thousand and four hundred hours, less by about one-tenth than is at the control of every farmer, without interference with his labors, and putting the summer six months entirely out of the calculation. Thus it will be apparent, that every farmer between the age of fifteen and fifty years, in his long evenings, has one-tenth more of leisure which might be devoted to intellectual improvement, than the average period which young men devote to classical and professional study in the best public institutions in the country. Yet how little is this realized! How few take advantage of it! How few are aware that such is the fact! Yet, how many might, by this means alone, arrive at a position as scholars, in society, of which they do not dream!

Nevertheless, valuable as these evenings are, when standing alone, it may easily be seen, as we shall show, that they are but a fraction—a small fraction—of what is within the reach of the agriculturist. We beg our readers not to be alarmed. We are to advocate no relaxation of manual labor—no neglect of attention to the various details of occupation in the best forms of husbandry. Far be it from us to encourage a relaxed viligance in the supervision, or a superficial adhesion to the most thorough systems of practical farming. Far be it from us to attempt invigorating the mind by reducing the support of the body; or by pursuing mental wealth by impoverishing the purse. The process we shall recommend will be attended with no such liabilities. Indeed, the reverse will be the consequence.

If manual labor, particularly in agriculture, were similar to the labor of the merchant, or to professional occupation, our hypothesis would be unsound, and of course impracticable. The labor of the latter is not manual, but almost exclusively intellectual, leading also to physicial exhaustion. Not such is the labor of the agriculturist. With few exceptions, his labor is as mechanical as the action of a clock. After his subject is once understood, the action of his mind is not required; his thoughts can scarcely be said to be upon it. A man, for instance, in walking, moves his feet mechanically, seemingly without the slightest volition. Of course, his thoughts may be on any other subject; the solution of a mathematical problem; or, questions in history, philosophy, and metaphysics. Indeed, how peculiarly favorable to the workings of the meditative mind is the exercise of walking, far more than the seclusion of the closet! This gentle physical action seemingly puts the mental machinery into motion; the vigor and elasticity of the one, facilitates corresponding developements in the other. Besides, what an enlivening influence is here imparted to the mind, by the beautiful array of nature spread over us in unmeasured loveliness! Who can inhale the rich odors of her vast domain, floating on every passing breeze, or behold the graceful waving of trees and grass, or hear the rich, untaught melody of the feathered creation, during his morning walks, and not experience a fresh impulse of thought in his own bosom? The individual that can do it, barely deserves the name of man; is but little elevated above the brutes.

Notes on Farming in Ohio.

Eds. Cultivator.—From Massillon I went to Coshocton. That town is but little changed in appearance from what it was a dozen years ago. The canal being on the opposite side of river, (Muskingum,) the town of Roscoe, at the junction of the Ohio and Erie and Walhonding canals, has the most of the business, and gets the produce for a considerable extent of country around. At Roscoe, there are two very extensive flouring mills, and this year there is wheat enough to keep them in full operation.

In the immediate neighborhood of Coshocton, there *is a change*. What used to be called "the plains," which fifteen years ago produced little else than scrub-oaks, has now been converted into farms of the most flourishing appearance. Several brothers by name of Burt, and other families from Orange county, N. Y., went there and bought considerable tracts of this plain land, at very low prices, and instead of its being the poorest land in the county, it is now considered almost equal to the best bottom or alluvial lands. It is easy to cultivate, and with a proper rotation of crops, and the judicious manner in which the owners manage it, it is very productive. There seldom occurs a failure of a crop. The wheat and other small grains, do better here than on the bottom land. I have heard of crops of corn that were 90 to 98 bushels to the acre, last year; and this year the prospects are good for crops equally as large. The bottom lands are very rich, and very

extensive, both up the Walhonding and Tuscarawas, and down the Muskingum valleys. Corn is the staple commodity on these bottom lands, and is grown to a very great extent—especially down the river 15 miles, as far as Dresden.* There are here many good farmers, and their crops are generally 75 to 100 bushels to the acre. There are, however, (perhaps unfortunately) many *large land holders*, and some of these rent out their lands on shares, or, for 20 bushels of corn to the acre, (equal to about five dollars) and there are numerous instances where the same land has been kept in corn for 15, 20 or 25 years in succession. I asked the question of different persons, how the crops compare with those raised ten years ago? The answers generally were, 10 to 15 bushels per acre less. This system, if pursued, must, I think, before many years, necessarily require a change. The tenants, occupying only from year to year, naturally want to *get off* all they can; and at the same time bestow as little labor as they can; and as soon as they can accumulate sufficient funds, they are off to the new lands of the west. There is but a small amount of live stock in the valley. The owners, or land lords, require the corn-stubble to be left on the ground, and plowed in—that generally being all the manure that is applied to the soil.

Messrs. E. and G. W. Adams, near Dresden, pursue a different course from that above described. They have, within the last few years, commenced the stock-feeding business. This year, they cultivate 240 acres in corn, besides other large tracts rented out on shares. Their lands are partly used for hay and pasture, in connection with corn and other grain. They pursue the Sciota system—cut the corn and put it in shocks, and from it feed through the winter. Last year they fed 800 head of cattle; this year they will probably feed 1000, for the Philadelphia market. These gentlemen have recently annulled two flouring mills that were built some 15 or 20 years ago, and have erected, at a great expense, two other mills, which combine all the improvements of the present age, and are so arranged as to save a vast amount of labor. They make and ship to the house of Adams & Sturges, New-York, from fifty to sixty thousand barrels of flour per annum, and it is of such superior quality as commands a price much above the ordinary brands.

At Zanesville, the mills have been put in the best condition, and they are preparing to do a large year's business. Some of the flour made here, is probably equal in *quality* to any made in the whole world. It is a wheat region, and has obtained a *reputation* for its flour, though I believe the quality is this year remarkably good everywhere. The variety of wheat called the "white blue stem," introduced here a few years since, by Mr. Jas. L. Cox, from Pennsylvania, is grown to some extent, and is very highly approved. It makes the most beautiful flour of any kind known. It is sought for at five cents or more per bushel advance on the price of other varieties, and all say the yield is equal to that of any other wheat.

I believe it is a well founded opinion, that the crop of wheat in this State, this year, is one-fourth larger than in any previous year. It is also said the wool clip this year has brought three millions of dollars; and to these add the corn, the beef and the pork, each of which are immensely large, and many other items of minor importance, and the products of Ohio this year will amount to a sum much larger than has heretofore been conceived of.

I find, almost everywhere, a disposition to extend the sheep and wool-growing business. The country and climate are well adapted to sheep, and if the management is properly understood and pursued, it will, I think, yield more in proportion to the capital and labor employed, than almost any other branch of farming. There are some very fine flocks in this neighborhood. A. C. Howard, C. Merriam, P. Buckingham, and others, have wool of superior fineness. Mr. Buckingham has, in different parcels, upwards of 2,000 sheep, and sold his entire clip this year at 41 cts. a pound.

Mr. Buckingham and Mr. Shelton Sturges, are devoting some attention to the breeding and raising of Devon cattle. Mr. Sturges has a portion of the stock that Mr. Isaac Dillon, of this place, brought from the farm of Mr. Patterson, of Maryland, a few years since. He has a cow and calf which, with some others, will be taken to the State Fair at Cincinnati, in October next. This cow is of beautiful form and symmetry—the hide and hair very soft—color dark red, exhibiting a rich, glossy appearance.

Culture of the Grape.—In the neighborhood of Cleveland, there are several persons who are bestowing considerable attention to the culture of the grape, and in the vicinity of Zanesville and Putnam, something has been done in this way. In the latter section the crop this season has been almost entirely destroyed by the curculio. Some persons think it the same insect that attacks the plum, but it is probably different. Mr. Levi Hartley, of Putnam, has, by much pains, saved a portion of his crop, and will again make a few pressings of wine. I tasted some which he made a year ago—the pure juice of the grape, with 1¼ lbs. of loaf sugar to the gallon, which is of very superior quality, and with two or three years age, I think would be equal to imported Madeira. It will readily sell at $2 per gallon. Mr. H.'s mode of manufacture is very simple, and not expensive. He may furnish you an account of it for publication. John R. Howard. *Zanesville, O., Sept. 18, 1850.*

* I am sorry to say that large quantities of this corn are used in the distilleries, and the liquid makes a large amount of commerce on the Ohio canals; but it is here, as elsewhere, men will do what they can make money by.

Wire Fences.

Eds. Cultivator—Agreably to your request, I write you on the subject of making wire fences.

In the fall of 1846, I commenced making wire fence, along a road running through a piece of wood. Five No. 9 wires, about ten inches apart, were stretched from tree to tree, and between each of these wires was stretched smaller ones. The wires were fastened to the trees by nails driven into the trees, one above and one below the wire, causing their heads to touch each other when they touched the wire. The five large wires, it was thought, would keep out cattle, and with the small ones keep out hogs, sheep, &c. This fence failed in the following points:

1st. The nails opened. This evil was remedied by winding small annealed wire around the nails. This was expensive—has since failed—rusting and being easily broken.

2d. The small wire broke, and sheep and hogs passed through the fence.

3d. The wires became bent; after four years use this fence proved a failure, both in appearance and utility.

The next wire fence was along the line of a lot, running east and west, through ground liable to

heave with the frost, and from its situation exposed to the north-west winds. Good chesnut posts were well put into the ground, about 12 feet apart—some of them braced. Four wires were stretched along these posts, tightened, and fastened with staples made from the same kind of wire. This fence, when first put up, appeared well and strong; but it was a failure. The posts were loosened and heaved with the frosts; the wind from the south would incline some of the posts one way, and the north-west wind, in its fury, would incline some another way. The wire became bent, and in two years the fence was removed—it had failed.

The next fence was made along both sides of a public highway, running east and west, where the snow was liable to be drifted in. Along this road, ran cattle, horses, sheep, hogs, &c. With post and board fence, they were often, after a storm, getting in from the road. On the south side is a meadow, on the north a meadow and two gardens, close to the fence.

I have been thus particular, for along this road a wire fence has been made that has now stood over two years—neither winds nor frosts affect it; no snow drifts in the road; no cattle or horses or hogs or sheep pass through it, though grass, corn, potatoes, cabbages, beets, &c., are growing in full sight, almost to their very noses, and nothing but the thin and almost invisible wire presenting, as it were, an unseen, but as yet impassible barrier.

This fence and others I now make as follows:

Chestnut posts about eight inches thick, not less than nine feet long, are put into the ground not less than five feet deep, and from 150 to 300 feet apart. Great care is taken to have these posts beyond the reach of frost. The posts at the corner of the lots, are *very firmly* braced. Then a board (or plank, or timber, or pole,) is laid along between these posts, and small chestnut posts or strips about two and a half feet long, sharpened at each end, are driven into the ground at each end of the boards, so that two boards can be nailed to it; and a short post, or strip, is also driven near the centre of the board. The board is then nailed on to the strip, care being taken that the top of the strip will be a little lower than the top edge of the board when the board is nailed to the strips. Four inches above this board, a quarter inch hole is bored through the post; five inches above this another hole is bored, seven inches above this another, eight inches above another, and ten inches above this another—(this for a five wire fence.) The wires are now passed through these holes and fastened with staples. In tightening the wire, the weight of the wires is taken off, by rendering them through staples slightly driven into uprights, set up about every 50 feet for that purpose. Care is taken so to tighten the wire, that in adding the pickets, hereinafter mentioned, the wires will, when the fence is finished, be sufficiently taut. Pickets four feet long and one inch square, are now, about every four feet, nailed with two nails to the board, (or plank, &c.,) or passed through two staples, driven into the board, (or plank, &c.) The pickets are not necessarily driven into the ground but stand upon it. Care is taken to have the wires the same distance apart on each picket, as they are at the posts. This is done by placing a picket near the post, and fastening the wires to this picket by large staples, so large that this picket can slide along the wires as you place the other pickets, and fasten them to the board and wires. The wires are fastened to the pickets by small staples either driven home or so driven that the wires can render through them.

Another fence is made as follows:—Five horizontal wires, nine inches apart; pickets four feet apart—no board or plank, &c., at the bottom. This fence is fastened like a suspension bridge, at the two ends, and oscillates from one to three feet, according as the permanent fastenings are apart. The pickets in some of the stretches, as the ground is uneven, will not touch it—the wires suspending the pickets from the ground. Stones, as wanted, are buried under some of the pickets; strips of iron or wire being wound round them. A piece of wire is then wound round each piece of horizontal wire, close along side of the picket, beneath which a stone is buried. The fence is thus brought down so that the pickets all touch the ground, and these wires being then fastened to the stones, the fence will be held in its place, strongly and well, by this unseen fastening. In some cases I hold down the fence by means of the boards or planks nailed at each end, to each other, by strips of boards about two feet long nailed along the ends. I have a fence like this running along a common, and no cattle or sheep, &c., have broken through it. Instead of wooden pickets, iron ones can be used to keep the wires separate and in place.

The following points should be preserved in a wire fence:

1st. The fence like a suspension bridge, must be *firmly* fastened at both ends, and *firmly* fastened nowhere else.

2d. The fence must be so constructed, that when cows, horses, hogs, &c., come in contact with it, it will be so loose that their contact will not be apt to bend the wire, and the oscillations of the fence will frighten them from it; yet so firmly fastened that the fence will return to its position when the disturbing cause is removed.

3d. You must have upright supports at proper distances to keep the wires apart, which supports must not he too firmly fastened.

4th. A wire fence should be so constructed that it will keep in and out what you intend to keep in and out; yet so constructed that men can climb over it and small boys through it, without bending the wires.

The holes that are bored in the large posts, are never plugged up with wood. Two men, at seventy-five cents each, exclusive of board, will put up 600 feet of this fence in one day. The cost of wire fence is as follows: Say cost of 12 feet or 1 panel—No. 9 wire at 5½ cts. per lb. is ⅓ of a cent per foot;

12 feet will cost,	$0	20
1 board	0	8
3 pickets	0	3
12 nails	0	1
I post ent up	0	7
Staples	0	3
	$0	42

The gate I use is as follows:—A frame with a horizontal or diagonal bar across it. Holes are bored two inches apart through the three bars of the gate, large enough to receive the wires. The wires are placed vertical, and are cut of such a length that each wire runs from the bottom of the gate up through the top bar curves about two inches above the top bar, returns down through one of the holes, and projects through the bottom bar from one to two inches. The stuff used for a gate twelve feet long, is 3 by 4; the stuff used for one of four feet, is 2 by 3. The cost of making the first mentioned gate, irrespective of materials, is fifty cents; that of the other is twenty-five cents. BENJAMIN NOTT. *Rock Hill, Bethlehem, Sep.* 20, 1850.

The Rot in Sheep.

The disease in sheep called *rot*, has long been formidable in Europe, and has, in some seasons, been the cause of great losses to the owners of sheep in our country. It is a disease, however, which is but little understood by the American sheep-owners generally,—so little, indeed, that it has often passed under another name, and the mischief which it occasioned has been, in some instances, attributed to causes which had no connection with the disease. In a lecture lately delivered before the Royal Agricultural Society, by Prof. SIMONDS, on the "structure and diseases of the liver," some observations were made which throw much light on the nature of the rot, the means for its prevention, &c. We think a portion of his remarks will be read with advantage. EDS.

Prof. Simonds observed that no disease was probably so much feared by the sheep-owner, as the rot, and with reason, for it was most destructive to his hopes. It was in common parlance looked on as incurable, and therefore it was all important to inquire into the causes which gave rise to it. He need hardly tell them as practical men, that the prevalence of the rot depended very much on the quality and kind of food consumed by the animal. Some pastures were notorious for the rot in sheep; on other pastures, sheep, under all circumstances, in wet seasons or dry, were pastured with impunity. But as a broad principle, it may be laid down that an excess of moisture is prejudicial to the health of the animal. Sheep, by nature, are not only erratic animals, wandering over a large space of ground, but are inhabitants of arid districts. The skill of man has improved the breed, and he has naturalised them in moist and temperate climates, but, nevertheless, circumstances will take place, which show that the animal has not changed its nature; a wet season occurs, the sheep are exposed to cold and moisture, and the rot spreads among the flocks to a fearful extent. The malady is not confined to England or to Europe, it is found in Asia and Africa, and occurs in Egypt on the rising of the waters of the Nile. These facts are valuable, because they show that the cause of disease is general and not local—that it was not caused by soil or temperature, for it was found that animals in any temperature became affected, and on any soil in certain seasons.

A great deal had been written on the rot in sheep, which he could have wished had never been written. Many talented individuals had devoted their time to its investigation, endeavouring to find some one cause for it, as if it originated from one cause alone. But the facts he had or should allude to, would show that it arose from more than one cause. He had mentioned the facts with regard to the land sometimes producing rot and sometimes not; but he would go a step further and ask this question—was there any particular period of the year when animals were more subject to the attack? Undoubtedly there was. This time of the year [July] was the most likely period; and if a large quantity of rain now fell, the combined heat and moisture would produce a most luxuriant herbage. That herbage would be deficient in nutriment, and danger would be run, from the large quantity of moisture in the food acting as a direct excitement to the abnormal functions. When they had disturbance in the liver, and the accumulation of fat consequent on the animals being touched with the rot, it flourished much more than usual; and this reminded the lecturer that he had heard that the celebrated Bakewell was in the habit of placing his sheep on land notorious for rotting them, in order to prevent other people from getting his stock, and to bring them earlier to market for the butcher.

Referring again to the diseases of the liver, Prof. S. observed that the bile, in consequence of functional derangement lost its property of converting the chymous mass into nutritious matter, the animal fell away. Every part of the system was supplied with impure blood, for they might as well expect pure water from a poisoned fountain as pure blood when the secretion of the bile was interfered with. The liver being thus diseased, and the blood impure, they would have the existence of parasites of a particular kind. Some persons supposed that these parasites, which from their particular form were called flukes, were the cause of the rot. He regarded them as the effect—but although the effect, they multiplied so rapidly, that they became the cause of further disease. Animals in the earlier stages of the disease, before their biliary ducts became filled with flukes, may be restored, but when the flukes exist in abundance there was no chance of the animal's recovery. Those parties who supposed flukes to be the cause of rot had perhaps some reason for that opinion. Flukes are oviparous, they are multiplied by means of eggs, which mingle with the biliary system, and find their way out of the intestinal canal down on the land, for in the feculent matter of rotten sheep might be found millions of flukes. Mr. King, of Bath, unhesitatingly gave it as his opinion that flukes were the cause of the rot, believing that if sheep were pastured on land where their ova existed, they would be taken up with food, enter into the ramifications of the biliary ducts, and thus contaminate the whole of the liver. There was some reason for this assertion, because very little indeed was known with reference to the duration of life in its latent form in the egg. How long the egg would remain without undergoing change, if not placed under circumstances favourable to the development of life was unknown. It was the same with the ova, so long as it remained in the pasture it underwent no change, but place them in the body of the animal, and subject them to the influence of heat, the latent life in the animalcule would be developed. There was, therefore, some show of reason for this assertion, for how long life might be maintained in a latent form was not known. Wheat had been locked up for hundreds of years—nay, for thousands—in Egyptian mummies, without undergoing any change, and yet, when planted, had been found prolific.

In conclusion, Prof. S. made some observations on the mode of treatment. He was not there to say that rot was in all cases a curative affection, but at the same time he was fully aware that many cases of rot, that are now considered incurable, might be cured if sufficient attention was given to the animals. He mentioned one fact in illustration. About two years ago he purchased seven or eight sheep, all of them giving indisputable proof of rot in its advanced stages. He intended them for experiment and dissection; but as he did not require them all during the winter season, in which only he could dissect, he kept some during the summer. They were supplied with food of the most nutritious quality, and perfectly dry; they were protected from every storm, being placed in a shed, and the result was, that without the application of any medicine, two of those rotten sheep quite recovered; and when he killed them, although he found that the liver had undergone organic lesion, they might have lived on for years. Rot, in its advanced stage, was a disease

which they might consider analogous to dropsy—an impure fluid accumulated in various parts of the body, chiefly beneath the cellular tissue: and then there was several names given to it; some called it the water rot, others the fluke rot; but it was nothing more nor less than the same disease in different stages. If flukes were present, it was evident that in order to strike at the root of the disease they must get rid of these animals, and that could only be done by bringing about a healthy condition of the system. Nothing that could be done by the application of medicine would act on them to affect their vitality. It is only by strengthening the animal power that they were enabled to give it sufficient tone to throw off the flukes. The next thing was to lessen the action of the ova on the intestinal canal; for this purpose many advocated salt. It was an excellent stimulative of the digestive organs, and might also be of service from the chloride of sodium which it contained. So well is its stimulative action known, that some individuals always keep salt in the troughs. That it was an excellent preventive, they had good proof, seeing that it mattered not how moist the pasture be in salt marshes; no sheep were ever attacked by rot in them, whilst those sent there infected very often came back free. Salt therefore must not be neglected; but then came the question, could they not do something more? he believed they could. They must throw tonics into the system, especially those which they got from the mineral kingdom. He should prefer sulphate of iron,—iron was found in animals,—it was one of the constituents of the blood, and used in the form of sulphate it gave a greater tone and energy than in any other form. Its use, therefore, ought never to be neglected in the earlier stages of the disease. He had already alluded to the fact, that when the liver did not perform its functions, an effort was made by the kidneys to carry out its functions, the kidneys should therefore be stimulated; but he must not be supposed to recommend the exhibition of diuretics which would produce debility, but of medicines which would give tone and strength to the system and act on the kidneys as well, for which purpose nitric ether was an agent which ought to be administered. The principles he wished to lay down were, to sustain the animal by placing them in a situation where they should not be exposed to the debilitating effects of cold storms, to supply them with the most nutritious food, such as contained but a very small quantity of water, and, as a stimulant, to mix with it salt. To administer sulphate of iron, and occasionally doses of nitric ether. He made no doubt that if those principles were carried out, that instead of sending their sheep to the knacker's yard, they would be able, at least in its early stages, to cure the disease and send their sheep to the butcher.

Fall Plowing.

The question is often asked, whether fall plowing is advisable? It may be advantageous or injurious, according to the character of the soil, and the circumstances under which it is performed. Soils which are too loose in their texture are liable to have their soluble matter drenched out of them, if stirred late in the fall, by the heavy rains of winter and spring. Hill-sides are, also, liable to be washed and gullied by the same causes.

Again, the *particular time* in the fall at which plowing should be done, is an important point, and this must be determined by the objects which it is sought to attain. If the land is in grass, and it is wished to have the sward rotted by the following spring, the plowing should be done early in autumn, in order that the warm weather may bring on decomposition before winter. If plowing is deferred till the commencement of cold weather, but little change will take place in the sward before spring—so little that if cross-plowed, much of the grass will be found alive, and by being again brought to the surface, will grow and obstruct the growth of the crop which is put on the land, or increase the expense of cultivation.

On clayey soils, there is still another disadvantage in connection with late plowing, if it is done in the ordinary way. The soil is liable to be made into mortar and run together by rains, so that by seeding-time it becomes closely packed. It is difficult after this to bring the soil into the friable condition required to fit it for a crop, without plowing again, and that operation would bring back the undecomposed sod, to which, as just remarked, there are weighty objections.

So far as regards the improvement of the *texture* of soils, it may be assumed that those of a clayey and tenacious nature, and those only, may be benefited by late plowing. The improvement in such cases results from the division of their particles by the action of frost; by this their cohesion is overcome, and access given to the air, which dispels acids injurious to vegetation—thus rendering soluble and available to plants, the food which was before inert. But these desirable results can only be obtained by the soil being frozen when it is in a comparatively dry state. If it is wet at the time it is frozen, and remains so till it is thawed and settled, no pulverizing effect is produced, the favorable agency of the air is excluded, and the soil remains in an ungenial state.

To obtain these advantages of frost, the soil should be thrown into narrow ridges, by turning two furrows together, in the manner called back-furrows. The furrows should be made in the direction best calculated to drain off the water, without allowing it to form large streams, as these might gully the soil. This kind of plowing can be done to the best advantage on land that has been under cultivation one season, or more. It can be done with sward-ground, but, as before stated, the grass will come to the surface when it is cross-plowed in spring, requiring much labor to destroy it. If, however, sward-ground were plowed in August or the first of September, the sward would become dead and so far decomposed by November, that it might be cross-plowed in ridges with advantage. The later in the season the ridging can be done, the better, as the soil will be more fully exposed to the action of frost, before the ridges have been washed down with rains. The ridges should be made as high and narrow as practicable, in order that the frost and air may act thoroughly on the soil.

There is no operation which tends so much to produce friability in tenacious soils, or which so much developes their fertility, and insures the growth of crops, as plowing them late in the fall, in the manner above described. But to derive the full advantages of the operation, the soil should be properly under-drained. This will admit the descent of water so readily that the soil will remain permeable and open; but if the water remains long in the soil, the beneficial effects of pulverization will be comparatively temporary. The *soaking* of the soil will reduce it to its former heavy condition.

Other advantages are claimed for fall plowing, which do not relate to the improvement of the soil; such as that the destruction of worms, in some instan-

ces the killing of noxious plants and in other instances the convenience of doing the work at a season when the farmer has more leisure, and his team is, perhaps, in a better condition to labor, and may be kept at less expense than in spring.

As to the destruction of insects, such accurate experiments have not, so far as we know, been made, as would show the advantages of fall plowing in this respect. It may be remarked, however, that worms prepare themselves for winter by descending into the earth, more or less; and if, after they have fixed themselves in their position, they are turned up to the air, while the weather is so cold us to prevent their motion, it is reasonable to suppose that before spring many of them would be killed. It is thought that this has been favorable to the destruction of wire-worms, which are generally most prevalent on deep soils, and those of a mucky character, though they sometimes do much injury on clays.

Witch grass, a couch grass, (*Triticum repens,*) may be to some extent destroyed by plowing just at the setting in of winter. Those who have had experience with this pernicious grass, know how great a nuisance it is, and how difficult to eradicate. To destroy it by frost, the ground should be plowed *deeply* in ridges. The plow should run, if practicable, to the bottom of the roots, that they may all be, as much as possible, exposed to the air and frost. The rains will wash out much of the earth, especially in sandy soils, leaving the roots bare, and the alternate freezing and thawing in this situation, will deprive many of them of vitality.

Letters from Prof. Norton—No. II.

Notes of a Tour in Central New-York.

ANALYTICAL LABORATORY, YALE COLLEGE,
New-Haven, Conn., October 8th, 1850.

MESSRS. EDITORS—Having been both interested and instructed, by a recent visit to some of the central districts of your State, I propose to give you in this, and perhaps one or two succeeding letters, some of my impressions relative to the present agricultural condition, and the capabilities, of that region; together with such suggestions on points where improvements seemed desirable, as may properly be made in your columns.

The occasion of my visit, was a series of invitations to address the agricultural societies of the counties of Wayne, Seneca and Ontario, at their annual fairs, upon some subjects connected with scientific agriculture. These fairs coming near together, in point of time, I was able to accomplish the whole in less than two weeks.

Commencing regularly at the beginning of my tour, my first visit was to Wayne county. This county has within two years, adopted the plan of dividing its fairs. The county is long and narrow, and a single fair at one end is not attended largely by people from the other end; even from both ends to the middle, it is something of a journey in the absence of railways and steamboats. Owing to these circumstances the effect of the new system has been excellent. The same officers have the direction of affairs at both places, and theirs is the only extra duty connected with this improvement, for such it has been found to be. Now that the fair is brought into their immediate neighborhood, people begin to take an interest who never thought of such a thing before; and moreover the rivalry which has sprung up between the different ends of the county has stimulated each section to a great increase of exertion. I was assured that either fair is now better than the central fair used to be, and that more money is raised at each one now than was formerly obtained from the whole county. Such facts are encouraging, and point out the wisdom of bringing these exhibitions near to the doors of the farmers in order to draw them out; when once engaged, they are commonly very ready to keep on.

I was present at both fairs in this county, the first being held at Clyde. Here and at the other places which were visited, I was under great obligations to the officers and members of the societies, who drove me about the county in various directions to a great extent, and who also aided in every way the obtaining of information.

From Clyde I made a day's circuit of nearly 40 miles, in company with Mr. Joseph Watson, the excellent president of the Wayne county society. Our journey was through a section of the county which is for the most part new; where in many places the stumps show that the hand of man has but recently let in the light of day to a virgin soil. Here as in most other parts of this central region, plank roads are stretching in every direction, and are affording very great facilities in access to markets and in the ease of transportation; thus involving a consequent saving of expense, to all who have occasion to use them. This must be particularly apparent in winter and spring, whenever the roads are bad.

The geological features of Wayne county are various, it including no less than four of the important groups into which geologists have divided the State. We have the Onondaga salt group, the Niagara group, the Clinton group, and finally on the shores of lake Ontario, the Medina sandstone These groups include a great variety of rocks, limestone, sandstone, and shales or slates; but from what I saw of the surface, it did not seem to me that there was so great a variety in the character of the soil as might have been expected. This I conceive, is to be explained by the fact, that the surface is almost every where composed of drift or or transported materials, usually finely divided, but often in the form of coarse gravel; occasionally there is a sprinkling of boulders. I saw no land that we should consider unpleasantly stony in New England. These soils then, seem mostly to be deposits of a current which has at some long past period of the world's history, swept from the northward, and mingled the ruins of the various strata over which it has passed.

These strata fortunately for the farmers of Wayne county, were of varied character as above, and in their variety, afforded when mixed the material for a fertile soil. Had the granite rocks which lie to the north of Connecticut and Massachusetts, overwhelmed this region with a flood of quartz, feldspar, and micaceous boulders, such as reward the toils of the farmers in many parts of those States, Wayne would be in a condition very far different from that which she at present enjoys. Her farmers fairly shudder at the sight of fields, which would be thought in Litchfield or Berkshire counties, to have only about enough stones on them to keep the land comfortable and warm.

The eastern end of Wayne county being comparatively much newer than the western, its appearance is consequently less finished; the fields are not as a general thing so much cleared, and the farm buildings are less comfortable and extensive. There are most laudable and encouraging exceptions to this remark, on many farms that I noticed. The land in this section, is generally of a rather

light loamy character, easy to cultivate, and all fertile where it has not been run down by cropping without any returns. Except on such farms the wheat crop is good, but still, so far as I could learn, is probably as a whole not quite up to what it was ten years ago. On many farms the yield is increasing as it ought to do, but on many others it is decreasing under the influence of poor cultivation.

I am constrained to observe that this was the most *weedy* district that I visited. The uncommonly wet season which we have had, offers an excuse, but this can not be allowed weight in comparison with neighboring counties where the farmers have labored under equal disadvantages, and where the appearance of things is very different. The road sides are in many places perfect nurseries of weeds; they are allowed to ripen and shed their seed in every direction, over the neighboring fields. The Canada thistle I noticed going to seed in great numbers. The crop of Indian corn in all this region, is remarkably heavy this year; one hardly sees a poor field of it in a long days ride. In this end of Wayne county I was sorry to see that great numbers of the farmers pursued the practice of topping their corn, to which a large portion of our New England farmers so pertinaciously adhere. In the western end of Wayne, in Seneca, and in so much of Ontario as I saw, the opposite practice of cutting at the bottom is almost universal. There is no question whatever, but this is the better plan; it has been well ascertained, that the grain is of superior quality for being cut early and for ripening in the stack, and that the green stalks when thus dried, and afterwards cut up, are equal to hay when fed to cattle. The advantage then is most evidently on the side of cutting at the bottom, both as regards fodder and grain; we may even go still farther, and say according to the testimony of those who have tried both ways, that the labor required is less.

The farm of Col. Briggs, which according to my recollection is in the town of Galen, and which took the first premium in the east end of the county this year, is well worthy of attention: the owner was not at home, but we drove through the centre of the farm and saw many evidences of enterprise and skill. The fields are all large, none less than 50 acres, and some I should think much more. This is excellent economy, to have the fields as large as is consistent with the size of the farm; it saves a great amount of money in fencing, and the work can be carried on more economically on a large scale, as there is a better scope for the introduction of machinery. This principle Col. Briggs evidently understands, as we saw that his wheat was all put in with the drill, and heard that he adopted all the modern inprovements in the way of implements and machinery, as corn shellers, cultivators, reapers, &c.

His farming is all on an extensive plan; we saw at least 150 acres of growing wheat, and his crops are said to be uniformly good. The land on this farm looks as if it was cultivated on an improving system. I had not means of ascertaining how much stock is kept, or what manures are applied, neither of inquiring as to the rotation followed. The stone walls which have been extensively built, are an innovation upon the old crooked fences which struck my eye very agreeably, and imparted an air of general neatness. I fear, however, that the stones are rather small for a permanent wall. This farm on the whole presents a pleasing example of industry and skill; having said so much in its praise, I may venture to suggest, that any previous remarks as to weeds, apply here as well as in other cases; they were rather too abundant along the fences, and by the road side.

I was sorry not to have an opportunity to visit the farm of Mr. Streeter, in this part of the county; his show of stock at the fair was fine, and I heard of him on all sides as a most enterprising and successful farmer. The farm of Mr. Jos. Watson, President of the Society, has before been publicly described, and I will therefore only say that it will well repay a visit, being for general neatness and cleanliness from weeds, in advance of any farm that I saw in this section. The machinery in his barn is so ingeniously arranged, that it does a great amount of work with little trouble, and by the power of only two horses, moving with much ease to themselves. Much of his work is done by one horse.

I was particularly pleased by the appearance of his clean corn-field, and by four acres of drained swamp, which was formerly impassible to animals. It is now by means of a few drains, firm and dry, and this year is under crop for the first time with broom corn. The growth is gigantic, much of it being fully 13 feet. Under this swamp lies a bed of marl, an analysis of which is now being made in my laboratory. Yours truly, JOHN P. NORTON.

The Horticultural Department.

Village Door Yards.

It is often a cause of regret that so very few of our ornamental grounds approach in finish the highly kept English lawns. Henry Colman, speaking of the latter, says, "Nothing of the kind can be more beautiful; and I never before knew the force of that striking expression of the prince of poets, Milton, of 'walking on the smooth shaven lawn;' for it seems to be cut with a razor rather than with a scythe; and after a gentle shower, it really appears as if the field had had its face washed, and its hair combed with a fine tooth comb."

The truth is, it is hardly desirable to introduce into this country the expense of maintaining such high and costly finish to extensive artificial landscapes. But there is one place where it may very easily be done, with admirable effect and little cost; in the limited front grounds of the village or suburban dwelling. A half hour, spent every morning, before breakfast, by the proprietor himself, would keep the tenth or twentieth of an acre in the highest degree of neatness.

At the present season, when many are about to lay out and plant their grounds, the accompanying plans may afford some useful suggestions. The first, (Fig. 1,) is intended to embrace about the seventh part of an acre, and to avoid the too frequent and stiff appearance of a straight walk directly from the front gate to the door. It is chiefly grass lawn; the evergreen trees, near the outer part or boundary, are distinguished by being more darkly shaded; and if desired, they may be made to shut out neighboring buildings or objects which ought to be concealed. In so small a space only shrubs or small trees can with propriety be introduced, the larger of which should be near the boundary. The Norway fir, the Balsam, the Hemlock and other species of the finest evergreens, which usually attain the hight of large trees, may be kept small by shortening in their branches; shearing their surface makes them too stiff and formal. All evergreens and particularly the hemlock and arbor

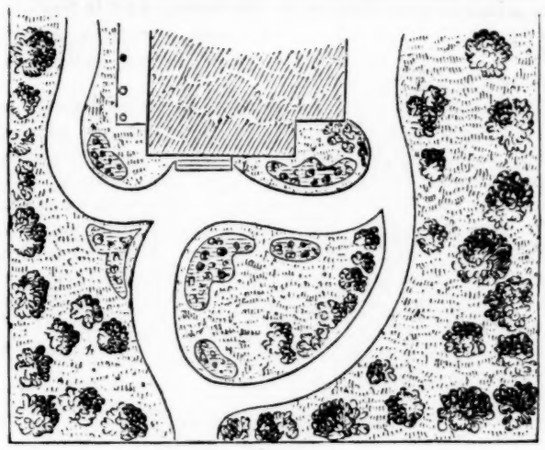


Fig. 1.

vitæs, will bear pruning into any shape or dimensions.

The ornamental effect of the grounds is much increased by the introduction of a few flower beds, cut into the turf, as shown in the figures. At the same time, the bad appearance which is some times given by cutting up the whole front yard into beds for flowers, is wholly avoided. No arrangement of grounds should ever be made which dispenses with turf in immediate connexion with the dwelling.

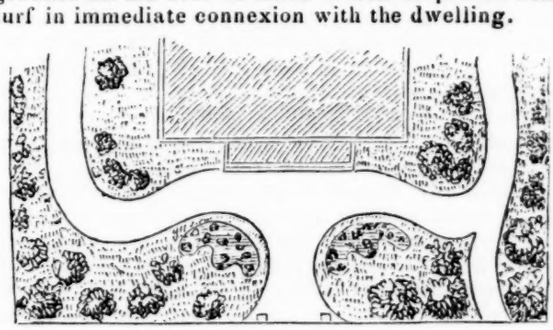


Fig. 2.

Fig. 2 is intended as a plan for a more limited space. A small inconspicuous gate at the right, opens a direct passage to the kitchen. In both instances, the kitchen garden, if any, occupies the ground back of the house.

A long chapter might be given relative to the selection and suitable disposition of the shrubs, and the flowering plants for the beds. This must be left mainly to the knowledge and taste of the proprietor or of the person he employs. It may be however observed, that such shrubs should be chosen as will appear well throughout the season, whether in blossom or not; and that if possible, the flowers for the beds should form a constant succession throughout the season. By commencing with the spring flowering bulbs, following those with herbaceous perennials, and closing with the finest annuals, a good succession may be kept up; and if in addition to these, a supply of the most brilliant green-house plants can be procured, the result will be highly satisfactory. It would be desirable in any case, to raise the plants in the back garden, until near the period of flowering, when they should be removed. roots, earth, and all, to the beds. Green-house plants in pots, are very easily and safely set out; and an equal advantage is derived by growing the others in pots for this purpose.

A very few words as to the treatment of the grass: before it is sown the soil should be trenched two or three feet deep if possible, and made rich with manure; this will keep up a fresh green color through the dryest summer. The seed may be sown early in spring; and if at the rate of two or three bushels per acre, it will in a very few weeks form a beautiful carpet of green. It must then be mowed with a lawn scythe, and if the mowing is afterwards continued and repeated as often as *once a week*, not a day less frequent, or as soon as a cut one inch high can be taken off with the scythe, it will soon rival in smoothness and softness the surface of velvet itself.

New-York Agricultural Transactions.

The ninth volume of the Transactions of the New-York State Agricultural Society, for a copy of which the writer is indebted to B. P. Johnson, corresponding Secretary, contains as usual a great deal of matter of the highest value. The lectures of Prof. Johnston, last winter at Albany, on the application of science to agriculture, occupying 107 pages; and Prof. Norton's Prize Essay on agricultural chemistry and geology, are neither of them productions of any ephemeral or ordinary character, and are rendered more valuable by the well known freedom of their authors from the chimeras which have bewildered some other eminent modern chemists. But we must pass all these, and notice at present more particularly some of the portions of the volume relating to horticultural subjects.

Analysis of the Apple.—An interesting paper on the analysis of the *fruit of the apple*, by Dr. Salisbury, furnishes some facts worthy of notice. Owing to the lateness of the season, (in spring,) before the analysis was commenced, the following sorts only were examined, viz: Swaar, Kilham Hill, Rhode Island Greening, English Russet, Roxbury Russet, and Talman Sweeting. From the numerous tables of results, the following facts are drawn:

The English russet contains less water and more dry matter than any of the other sorts. This is doubtless the reason why this variety is so hard to freeze. The Talman sweeting contains more, the Greening still more, and the Kilham Hill most of all; ranging in all these from 79 to 86 per cent. A fresh potato contains about as much water as the russet. These results show the reason that apples when manufactured into cider, produce nearly their own bulk of juice, a fact which has often puzzled many who merely regarded the solid nature of the fruit.

A striking difference in the composition of the apple and potato, is the entire absence of starch in the former, while in the latter it constitutes about one half of the solid part. The apple, according to this analysis, is rather superior to the potato in fat producing qualities, and which accords with the experience of some accurate farmers. The apple contains about twice as much of the compounds of nitrogen as the potato.

The russets were found to contain a larger portion of tannic and gallic acids than other sorts. These acids impart astringency, and are indicated by the black color given to a knife of iron or steel used in cutting this fruit. The apple is rich in phosporic and sulphuric acids, and potash and soda. Hence we may infer that bone dust, ashes, salt and plaster, would be likely to prove useful as portions of the manure applied to bearing trees, in addition to what is already contained in yard manure.

Keeping Grapes in Winter.—At the agricultural discussions, —— Marks, of Greene county, stated that "he had kept Isabella grapes in kiln-dried hemlock saw-dust till April, and they came out well. They were kept in a cool room where there was no frost. The past year, he used ma-

hogany saw dust. Pine saw dust does not answer; the grapes will taste of it. Has found the Catawba grape to keep best when picked just before it is dead ripe." This method of using kiln-dried saw-dust, is an old, familiar, and excellent one. Covering the jars with a cover, sealed with wax or tallow is adopted by some to exclude external moisture from the saw dust.

Grafting the Grape.—An experiment, proving very successful, was related in grafting the Isabella into the roots of wild varieties. Pieces of root a foot and a half long are cleft grafted in the common way, and the root is then buried in the soil so as to have the junction fairly below the surface. They grow well and have borne the season they were grafted.

Securing crops of Peaches.—A peach orchard at the foot of Catskill mountains, where the thermometer sometimes sinks to 16° below zero, has with a single exception, borne fruit for many years, by the following treatment. After the ground is firmly frozen in the fall, litter is placed round the trees four to six inches thick and trodden down hard. This prevents the buds from starting prematurely by keeping the ground frozen, and being kept back, they escape the frost.

List of Fruits.—The following varieties are added to the former lists by the fruit committee, as worthy of general cultivation:—

Apples—Wine apple, Dominie and Peck's Pleasant.

Pears—Doyenne d'Ete, Andrews, Flemish Beauty and Urbaniste.

Plums—Madison.

Cherries—Knight's Early Black, Black Eagle, Downer's Late and Graffion.

Peaches—Oldmixon Freestone, Bergen's Yellow, and Crawford's Late.

Gooseberries—Woodward's Whitesmith, Crown Bob, and Green Walnut.

Currants—Knight's Sweet Red, White Grape, and May's Victoria.

Raspberries—Fastolff, Franconia, White Antwerp.

A large portion of these varieties are represented by good figures, but one or two of the apples we should hardly have recognized. The Dominie (which by the way but barely deserves the company in which it is here placed,) is not more than one quarter the size of many specimens often seen; and Peck's Pleasant is not larger than the very smallest specimens, while it is furnished with an unusually long stem. The truth is, this fine early winter variety is often one of the largest apples, and has sometimes attained nearly a pound in weight. The distinction between the deep cavity in Knight's Early Black Cherry, and the very shallow cavity in the Black Eagle, is not well shown, although constituting a striking point of difference in these similar varieties. These are however but few and small defects, among a great deal that is accurate and excellent.

Osage Orange Hedges—Osage Weevil.

It seems to be established that these hedges will succeed well wherever the climate will admit the cultivation of the peach. Their strength, vigor and density is such, when well made, that no animal will try to pass them; and so sharp and numerous are their thorns, that they must form a perfect barrier against ordinary fruit stealers.

Prof. Turner, of Illinois college, in a communication to the Prairie Farmer, says he has now about *five miles* of this hedge on his farm, and it has already doubled the price of his land, that is he is now offered twice as much for it as he asked two years ago and could not sell it.

He thinks the chief cause that so large a portion of the seed fail to grow, is the ravages of the "Osage Weevil," a minute and almost microscopic insect, which feeds on the tip of the radicle. A year ago he lost six bushels of seed from this cause, and last spring he lost above thirty bushels, all well got out and cured in Texas. Sometimes, he states, the seed will push their sprouts nearly an inch, after they are incurably injured. Seed has been pronounced by different persons as "very fine" after he had found "by microscopic examination that it was not worth a cent."

Seasonable Hints.

Fruit in Cellars.—A great deal of winter fruit suffers early decay in consequence of a deficiency of ventilation, especially during autumn and after the fruit is deposited. Another cause of decay is the improper location of the shelves or bins, which are placed against or around the walls. By this inconvenient arrangement, the assorting of decayed specimens must be done all from one side, and the shelves must hence be very narrow, or the operator must stretch himself in a most irksome horizontal position. The circulation of the air is at the same time greatly impeded by the want of space next the walls. To avoid these evils, the shelves should be in the center with a passage all round. This allows circulation of air, and the shelves may be twice the width with the same convenience in assorting or picking. If suspended from the joists above on stiff bars, rats cannot reach them. We have never succeeded so well by any other than this arrangement. It is said that the Germans are very successful in the ventilation of their cellars, by a communication with the principal chimney, the heated air in which necessarily maintains a current, which sweeps out the noxious and stagnant gases from the vegetable and other contents.

Keeping Beets and Turnpes for the Table.—The epidermis of the beet and turnep root, unlike that of the potato, admits the rapid escape of moisture, and hence if exposed to dry air for a few days, they begin to wilt and lose their freshness. Buried in heaps out of doors, they keep well, but are hard to get at in winter. Good substitutes have been devised, by lining and covering the boxes which contain them in the cellar, with flakes of turf; or by burying them in barrels with slightly moist clean sand. A more convenient way, however, is to substitute *slightly* moist peat for the sand, which is very much lighter than sand, and more easily applied and removed.

Unheaded Cabbages.—There are often many of these when the crop is gathered at the approach of winter, commonly thrown away as useless. They may be rendered fine for spring use by transplanting them in a close double row, and then covering them with boards or slabs like the steep roof of a house, with an additional coating of a few inches of earth. They should then be properly ventilated. By next spring a large portion of them will be found well headed and delicately blanched.

Repelling mice from fruit trees.—We still often hear of the death of trees by mice, girdling. Prevention from this disaster is one of the easiest and most certain things in the world, consisting simply in throwing up a little circular bank or mound of earth round the trunk of each tree, nine

or ten inches high. One man will do hundreds in a day, and we have never known a single instance out of thousands of cases, where it has failed.

Protecting tender Plants and Shrubs.—There is one principle which should not be forgotten, whatever be the nature of the covering applied to tender plants, more especially to the woody portions or parts above ground. This is, that the *exclusion of moisture* is an important object without excluding air. Ligatures are sometimes left on inserted buds for protection, and more usually destroy the buds by retaining water like a sponge. Closely wrapped straw operates in the same way, as well as by excluding air, which is often important. Roots and stems like those of the grape, which will bear a greater degree of moisture, are partial exceptions. Roots, even, are often destroyed when in a too moist soil; and their is no doubt that many tender herbaceous perennials would survive the rigors of our winters, if in earth with a dry bottom, and sheltered from rain.

Transplanting Trees.

Eds. Cultivator—At the end of June last, I was forced to remove a quince bush, which stood just on the spot where I was to make an addition to my house. The tree was full of fruit.

I had read, I believe, in your valuable Cultivator, that a gentleman, removing rose bushes in the summer, had covered them with a blanket, and every evening put water on the leaves. I tried the same with my quince bush. The tree being nine feet high, was removed the 25th of June. I was forced to employ two horses to pull it out of the ground, and to bring it on the spot, where it was to be set in the soil. There I had dug a hole of seven feet diameter, and put in it a dozen pails of water. Though I tried to preserve on the roots as much earth as possible, the greatest part of it was lost in the transit.

The tree was set in the ground, the fruit all taken off, the ends of the limbs and twigs cut and shortened, and the whole carefully covered with three blankets. In the first week I sprinkled the leaves with water morning and evening; afterwards I did it only occasionally. Having removed the blankets in the beginning of September, I had the pleasure to see on all the limbs new twigs and new leaves, and the tree looking healthy and flourishing. D. B. K. *Washington Valley, N. J., Sept. 16th*, 1850.

Peach Trees.

William Stone, of Natick, Mass., gives the officers of the Middlesex Agricultural Society, a statement in regard to his culture of an orchard of one thousand peach trees. The trees have been set three years and are represented as "in a bearing state." The orchard is on a hill, one hundred feet above the general level of the surrounding plain; the soil a yellow loam, abounding in loose boulders of granite. Stones enough were dug from the ground to make a wall round three acres, on which the orchard stands. After several plowings, from 1843 to 1845, it was marked out in squares of twelve feet, and the peach trees set at the crossings. He prunes the trees of all the dry limbs, and all such as interfere with each other, or hinder the growth of the tree. He does not cultivate the ground among the trees, but covers the whole surface with straw or some kind of litter. He says, "Well covered in this way, the straw will last two years, and the trees will have less worms and flourish better than to cover the land with manure of any kind. I place about a peck of hard coal or wood ashes, at the root of every tree once a year, and it has not failed to keep away the borer. The reasons I give in favor of straw and hay as preferable to compost manure are, it saves labor, is cheaper, it prevents the drouth from penetrating as it would without it, and in case the trees stand on a side-hill it keeps the rains from washing the soil, and when the fruit drops it keeps it clean. I have tried this course for twelve years and am fully satisfied it is the best method."

Yellows.—Another competitor for the premium offered on peach trees by the above society, states that he has used urine with good effect, as a remedy for the *yellows*. He put about a gallon round each tree during the autumn and winter. He says he tried one sickly tree earlier in the season with manifest advantage.

Several competitors speak of having fruit from those peach trees only, which stood on quite high ground, the present season.

Cracking of the Doyenne Pear.

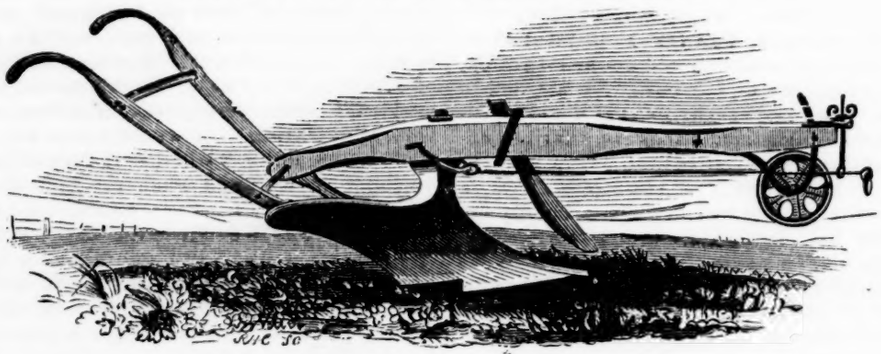
It is well known that in many of the eastern portions of the United States, the white Doyenne pear is rendered worthless by the cracking of the fruit. This has been ascribed by A. J. Downing and others to diseased action, consequent on the exhaustion of the soil by the continued growth of the tree on the same spot of ground. The following interesting fact may serve to add to the materials for determining this question:

A young and thifty tree of this vareity, standing on a gravelly loam, bore its second crop of fruit the present year. When the pears were two-thirds grown, the leaves were observed to be affected with the black spots which characterise the leaf blight, and always precede the premature falling of the leaf. At the same period, similar black spots began to cover the surface of the young pears, gradually extending on many of them till they cracked, shrivelled, and fell from the tree. Others, side by side with them, escaped this disaster, and continued fine and fair specimens until ripe.

The region of country where this young tree stands, has been long celebrated for the perfection of this variety of the pear, nothing of the kind ever having been known before within two hundred miles. Within a mile from this locality, and on a piece of ground strikingly similar to all external appearance, is another white Doyenne tree, twenty or thirty years old, the crop of which has always been perfectly smooth and fair, and has for some years past sold for twenty to thirty dollars per annum. It stands in a grassy yard, and receives no manure, solid nor liquid, nor any cultivation.

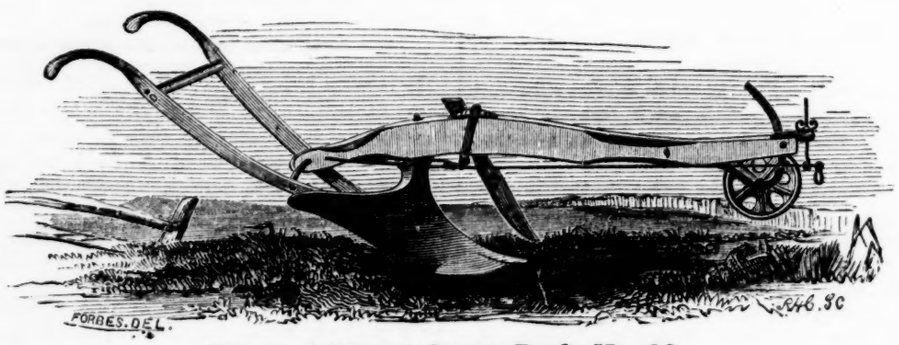
New Currants.—S. P. Fowler, of Danvers, Mass., remarks in the N. E. Farmer, that Knight's Sweet Red "may perhaps by some persons be considered a little less acid than the White Dutch, while others would not admit it. I should not cultivate it for its supposed comparative sweetness." The Champagne, he says, is not a great bearer, and the fruit, though beautiful, is very acid, most persons leaving it to be eaten by birds. Knight's Early Red he has not found to be much earlier than the other varieties, not being worth cultivating for this characteristic, and possessing no other. The Red and White Dutch are good, and are by some persons thought to be the best." We believe these conclusions have been arrived at by most other cultivators of experience.

NEW-YORK STATE PREMIUM PLOWS.



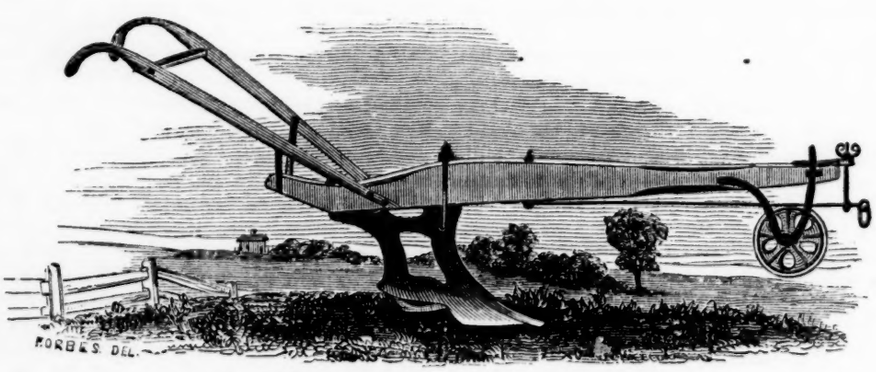
Prouty & Mears' Centre Draft, No. 25:

Which received the first premium for sandy soil.



Prouty & Mears' Centre Draft, No. 30:

Which received the first premium for stiff soils



Prouty & Mears' Subsoil Plow, C:

Which received the first premium.

REPORT OF TRIAL OF PLOWS.

In our last we gave cuts of four of the plows which received premiums at the trial by the New-York State Agricultural Society, in June last. Herewith we give cuts of the other premium plows, except the one which received the second premium for sandy soil, which has not yet been received. The report appears to be received with general approbation. JOHN DELAFIELD, Esq., in a late letter, observes: "The plow report is admirable, and seems to me a true and sure standard for future trials. Our agricultural artisans have long exhibited a knowledge of the principles of force and motion, but in the plow they have not reached, perfectly, their application for our most economical use. The present report will bring them in close contact with our farm wants, and their skill will, assuredly, ere long, give us all we desire."

The Farmer's Note-Book.

Farming in Indiana.

Eds. Cultivator—There are, perhaps, but few of your readers who are, to any extent, familiar with farming operations in this region of country; and I propose, with your permission, to give them a brief account thereof. This county, (Wayne,) is one of the first in the State in point of population and production as well as in agricultural improvements. It comprises in its eastern portion an undulating beech clay soil, resting upon blue limestone, which is accessible for quarrying in many places, and its western portions include some rich first and second bottom lands unsurpassed in fertility. Its first settlers were from N. Carolina and Pennsylvania principally, with a "sprinkling" of emigrants from most of the south eastern States. Corn has been *the* crop as long as it could be coaxed to grow, succeeded by wheat in later years. We have, perhaps, some of the finest exemplifications of the "*skinning system*" extant—many of the original settlers having cropped with corn after corn until it was somewhat probematical whether the yield would equal the seed, and finally sold out at small prices and moved west, there to run another round of "*skinning*" and starving. This is true only of the clay lands, the "bottoms" like the lamp of Alladin, still bringing forth at every rubbing, very good crops. At this time, but a small portion of clay lands remain in first hands, but are now in the possession of those who are endeavoring, and with more or less success, to restore them to a state of comparative productiveness. We can now number two or three who use the sub-soil plough, in connection with barn yard manure, leached ashes, charcoal, &c., making these same exhausted lands produce 25 to 35 bu. of wheat per acre, and 75 to 100 bu. corn. Others again are ploughing 3 horses abreast 8 to 12 inches deep with the best success, in many cases nearly doubling the crops of the three inch style of ploughing, while hundreds of others are watching these results, and, like king Agrippa, are "*almost persuaded*" to be (Christian) farmers.

The want of good agricultural implements has been, and is severely felt here, although no part of the country would *pay* better than this for their introduction. Messrs. Beard and Sinex of Richmond, are now manufacturing the "Empire" ploughs with wrought steel mould boards, made with bar shares and wrought iron standards, which are superseding all other ploughs now in use here. We stand much in need of some good drilling machines for wheat, gang plows, cheap and effective straw and stalk cutters—in short, of farming tools of the best descriptions generally. Any of your eastern manufacturers who would like to introduce their articles into this State, can by addressing me, privately, receive such information as will enable them to do so advantageously. Especially are we in want of the most improved stock of *Cattle, Horses, Hogs* and *Sheep*. There is a growing interest in these matters here at this time, and some of your eastern breeders would consult their interest by sending some of their surplus stock into this State. I would very willingly undertake to act as agent for the sale or service of stock of any of the improved kinds which might be sent here and any of your readers wishing to do so can write to me on the subject. We are expecting to have a Morgan horse here from Mr. W. H. Ladd of Richmond, Ohio.

Our season has been one of unprecedented drought: We had no rain from corn planting until 19th of June, at which time rain fell moderately; from that time until the present, we have not had to exceed *half an inch of rain*. Our wheat crop was one of the finest ever raised. Oats mostly very short. Hay, hardly half a crop. Barley a failure. Corn, a light crop, (the best were ploughed the deepest.) Potatoes a complete and total failure—hundreds of vines without any appearance of a potato about the roots. Early apples pretty fair; late ones small and backward in consequence of the drought. Although about seeding time, very little ground is or will be ploughed for want of rain. It is really discouraging, many springs and wells having nearly or quite failed. W. T. Dennis. *Richmond; Ia., Sept. 1st* 1850.

Minerals in Washington County, N. Y.

Dr. Fitch, in his survey of this county, observes that about 118,000 acres of its surface is underlaid by granite rock, which belongs to the same general range, as the rock which is so prominent in the counties of Warren and Essex. It appears that this rock contains valuable minerals. Dr. F. speaks of them as follows:—

Iron Ore.—Two valuable minerals are being furnished to the world at the present day, by this rock, from within the bounds of this county, viz: iron ore and black lead. Beds of iron ore have been opened, both at Mount Defiance and in the north part of Dresden, and there is little doubt that they occur in all parts of this range from Ticonderoga to Fort Ann; but it is only in the last of these towns, in the neighborhood of Mount Hope furnace that the mines are at present worked to any extent. This is the only smelting or high furnace within the county, and the company to which it belongs is also the proprietor of most of the mines that are as yet known in the neighborhood. The furnace is situated two miles up Furnace brook from the head of south bay, and about a mile from Furnace pond. It gives employment to 150 or 200 men and 50 teams, and is making some 1,500 tuns pig iron annually. About a third of the ore is obtained from down Lake Champlain and the remainder from different ore-beds in the vicinity, this admixture forming a better quality of iron, I am told, than either ore does separately.

Graphite.—Graphite, plumbago or black lead, (which is lead only in name, the mineral being composed of carbon with a slight admixture of iron commonly, but none of lead,) the material from which pencil-points are manufactured and which is in extensive use for polishing stoves, diminishing the friction of wheel-axles, &c., is disseminated through most parts of this rock, and occurs in abundance in the north part of Putnam, from which town is obtained a portion of "Ticonderoga black lead," which has superseded most of the other kinds of black lead in this section of the state. It is at present afforded at fourteen dollars per hundred weight. Twenty-two thousand pounds of this mineral passed the port of Whitehall in 1834, mostly from the vicinity of Ticonderoga, and the quantity has greatly increased since that date. Alexander Robertson, Esq., informs me that no exploration has been made to ascertain how abundant this article is within the town of Putnam—that one of the men engaged in this business at Ticonderoga comes with his wagon to the north-west part of Putnam, digs what he wants out of the rocks, carries it home, and when this is sold out he comes again. Every housewife will hope that the supply may prove to be inexhaustible, so superior is it in its crude, native

state, to the old "British Lustre," or any of the other polishing substances known.

Duties on Wool.

Eds. Cultivator—As a wool grower, I feel to express a sense ef gratitude to Mr. H. C. Miriam of North Tewksbury, Mass., for his very able article upon foreign and domestic wool, published in the September number of your paper. From his sentiment, however, that because the Scotch black faced laid wool was duty free to the English carpet manufacturers, they are enabled to hold in check and defeat the prosperity of our domestic carpet manufacturers, I must take the liberty of dissenting. If that wool is grown in such immense quantities, and is so very cheap, our manufacturers can avail themselves of it as well as those of England. If it is objected that the wool for our manufacturers has to be transported across the Atlantic, it may be answered that it has also to be transported across the Atlantic in the cloth before it can affect the carpet manufacturer in this country. If it is objected that a duty of thirty per cent is imposed upon the wool in its raw state, it may be answered that a duty of thirty per cent is also imposed upon the wool when manufactured, and when it shall have been converted into cloth, which would place our manufacturers on a par with those of England as far as the wool is concerned, and would give them the advantage of thirty per cent duty imposed upon the labor and other ingredients which enter into the manufacture of those carpets.

It was the attempt to discriminate between the different kinds of wool to be applied to different objects, which produced the most mischief to the wool growers under the tariff act of 1842. I trust I may never see an attempt at such discrimination in any future act that Congress may see fit to pass upon that subject. Titrius. *Hillsdale, Sept. 7th*, 1850.

Meteorology.

Eds. Cultivator—The following observations are the results of some attention to the Meteorology of my location for the past twelve months, ending the last day of August 1850:—

The whole amount of rain, 35 9-16 inches; of snow, 59¼ inches. More rain in Oct. (6⅝ inches) than any other month; although July and August measured, respectively, 5⅝ and 5 11-16 inches. The greatest amount of rain at any one time was July 17th, (3¼ inches;) a severe storm of wind and rain from E. N. E. More snow in March (25 inches) than any other month, and the greatest depth of any one snow, was 6¾ inches. The first nipping frost of the season was Oct. 9th, and the last the 22d May.

It has been observed that the mean annual amount of rain in different parts of the world are fairly represented in the following list:—

At Paris, the mean annual amount,	20	inches.
London "	25	"
Geneva, (Switz.) "	30	"
Boston, (U. S.) "	36	"
New Orleans, "	45	"
Havana, (Cuba) "	109	"

Our summer, that has just passed, has been quite different from its predecessor: no "parching drought" has prevailed in this section of the country; no devastating pestilence has "stalked forth at noon-day" in our midst; no frantic excitement in regard to "golden bauble," has taken away the population of our towns; on the contrary, we have had the continued luxurious growth of June, the salubrity of November, and the quiet of April, the whole summer. Our county, although reputable for its dairy products, at least, has not progressed in the ratio of an earlier period. This is owing to the facilities of agriculture elsewhere, and the peculiarly unfavorable character of our seasons for several years past. Do our seasons observe a cycle in which they are approaching a character they formerly had? Or has physical improvement so far progressed that a permanent change is impressed on our climate? The history of other countries indicates the latter. It has been observed that a country covered with timber or forests, has a temperature about 10° less than when cultivated. Evaporation is supposed to be greater, or rather, more moisture is exhaled from a given extent of forest, than is evaporated from the same extent of water. Evaporation and rain, are also sources of cold, and more abundant in countries covered with forests. Our seasons, or rather our climate, is in a transition stage, without the settled and uniform character of older countries, or even the less variableness of newer ones. The present season then, is not a proper criterion of the future; nor yet is it without some indication of more fruitful periods. D. T. Brown. *Hamptonburgh, N. Y., Sept. 19th* 1850.

Stumbling Horses.

It is a general, but very mistaken notion that the safety of a roadster depends upon his lifting his fore-feet high from the ground, whereas it all depends on the manner in which he places them down upon it. The highest goers are often the most unsafe; and there are thousands of instances of horses going *very near* the ground and never making a trip. It is, however, a well established fact, that if the form of a horse's shoulder, and the consequent position of the fore leg, enable him to put his foot to the ground *flat*, with the heel down, his lifting the foot high is not at all necessary; whereas, on the other hand, if, by any improper position of the leg, issuing out of a short, upright, ill-formed shoulder, the toe touches the ground first and as it were digs into it; no matter how high such a horse may lift his leg, in any of his paces he will be liable to stumble. *Essay on the Horse.*

Destruction of the Wire Worm.

The injury done to crops by the wire worm is often very great. It attacks the seed grain, after it is sown, and by eating out its substance, and by boring into the heart of the tender stalk, the growth is prevented. It is a hard insect to kill, being protected by a smooth, tough shell. A writer in the Mark-lane Express states that he collected several of these worms, and tried the effect of different substances applied to them. He says, "In my first experiment, I tested their tenacity for life with the most corrosive and powerful poisons. Preparations of corrosive sublimate and arsenic were used in vain. Their immersion in solutions of these poisons occasioned them no inconvenience; in fact, it appeared to give them more pleasure than pain. I then tried the effect of vitriol and aquafortis: these liquids certainly destroyed the worm, but only after a very considerable time. At length, by accident, I was induced to try liquid ammonia. The result was marvellous; in an instant these creatures,

which had hitherto resisted with comparative indifference the most deadly and corrosive acids and poisons, were shrivelled up, and reduced almost to the state of a cinder. Finding that ammonia possessed this astonishing power, it then occurred to me that this agent might be employed in an extremely simple and effective way. I took a portion of the earth containing the worm, and mixed with it a small quantity of lime; to this I added a quantity of powdered sal-ammoniac; the effect of this was the decomposition of the sal-ammoniac by the lime, and the liberation of ammoniacal gas: this had precisely the result of the liquid ammonia; the worm was instantly destroyed as by an electric shock."

We do not know that this method of destroying the wire-worm, can be made practically useful; we publish it to induce a repetition of the experiment, under various forms, in the hope that some valuable results may be brought out.

Addison County (Vt.) Fair.

The Agricultural Society of this county held its exhibition at Vergennes, on the 25th of September. The county embraces the richest portion, perhaps, of that part of Vermont lying between the Green Mountains and Lake Champlain. It is a district more especially devoted to grazing, than any other branch of farming. Hence it was to be expected that the leading objects of this exhibition would be the various kinds of live stock, particularly horses, cattle and sheep. In all these classes of animals the display was highly respectable, and in *horses* it was decidedly fine. By the politeness of J. H. Barret, Esq., secretary of the society, we are enabled to state the aggregate number of animals exhibited, excepting swine, as follows:—cattle, 196; horses, 74; sheep, 142.

Among the horses, the "Black-Hawk" stock was very conspicuous. With the exception of one breeding mare, five years old, the oldest of this stock exhibited were but four years old. None of them competed in the class of *matched* horses; in the other classes comprising twenty premiums, the progeny of Black-Hawk took *fourteen*, including the premium for the best breeding mare, best "single driving horse, (mare or gelding)," and all the first premiums excepting one. Among them were some very superior animals. Such stock as the four-year-old mares of Mr. Sherman of Vergennes, and Mr. Moore of Shoreham, the two-year-old colt of Mr. Johnson Middlebury, and the yearlings of Mr. Doane and Mr. Moore of Shoreham, and Mr. Adams of Panton, as well as others of the same family, cannot fail to be highly valued and admired.

The sheep were mostly Merinos, though there were some Saxons and some Leicesters. With the facilities for rapid and easy transportation to market, which are now open to this section by railroad, we have no doubt that the production of mutton, on the best lands, will be found profitable; and the English breeds of sheep, or some crosses from them, will be adopted to a considerable extent. Those who intend to engage in rearing this description of sheep, should endeavor to breed from the very best animals. We venture to give this hint, from the circumstance that most of the Leicesters exhibited here did not appear to be well bred.

Of the Merinos, we noticed that the fleeces of those which appeared to be generally regarded with most favor, were very heavily loaded with a sticky, adhesive gum, or yolk. On inquiring the object of producing so large a quantity of this matter, we were told that it was considered *profitable* so long as the manufacturers, or their agents, would pay for it at the same price per pound as wool. This answer somewhat surprised us, as we had supposed the manufacturers were in earnest in their efforts to purchase *clean* wool. Will some one explain? Does the manufacturer deduct from the price of the wool he buys, an equivalent for the weight of yolk which it contains? This is rather an important subject to the wool-grower; it is important that he should know on which he can make the most money,—the production of wool or the production of gum.

The cattle were mostly of large size. Many of them were descended in part from the Short-horn stock introduced by the late Gen. Barnum, of Vergennes. This stock has been crossed, more or less, with Short-horns from other herds. They are, in general, liable to the objection of having too much bone, and rather coarse flesh; though some of the animals exhibited were of good form and quality. There is no natural obstacle to the rearing of the finest cattle in this section; nowhere is grass more abundant or more nutritive; and it is only necessary that the points and quality which constitute excellence in cattle should be understood, and applied by a judicious selection of breeding animals, to rear cows and oxen here, which for the dairy, the stall, or the yoke, might challenge comparison with any in the world.

We noticed several full-blood short-horns. A bull and several cows, fair specimens of the breed, were exhibited by Charles Smith, Esq., of Bristol, the president of the society. A bull shown by R. T. Robinson, of Ferrisburgh, bred by Mr. Vail, of Troy, is a well formed and thrifty animal. There were but few Devons. Mr. Sanford, of Orwell, exhibited the fine young bull which was at our State Fair. We saw no full-blood Herefords. There were several pretty good half-bloods. We were disappointed in not seeing specimens of this valuable herd here, as there are good ones owned in this section, and their thriftiness shows that they are well suited to the location. The only full-blood Ayrshire, was the bull (now thirteen years old) presented several years since by Mr. J. P. Cushing, of Massachusetts, to Mr. Wightman Chapman, of Middlebury. He is still spirited and active, and has sufficient vigor of constitution to render him useful for several years. He has been an animal of great value, and the section where he has been kept, has suffered great loss from his not having been properly appreciated.

We noticed that the Short-horns and Herefords were classed together—that is, competed with each other; and so of Ayrshires and Devons. We do not perceive the advantages of this system. We do not see how a fair comparison can be made between animals belonging to breeds whose characteristics are widely different. The leading qualities of the Ayrshires, for instance, are such as fit them particularly for the dairy; while those of the Devons, on the other hand, are such as adapt them particularly to labor. Hence the points of each must be judged with reference to different objects, which renders comparison impracticable.

Oxen and steers were numerous. Several of them were in high condition, for grass-fed cattle. We saw a pair of five-year-olds, exhibited as working cattle, put on the scales, which weighed upwards of 4,000 lbs. Mr. J. N. Smith, of Addison, showed a pair, six years old, of fine appearance, and in good working trim, which weighed upwards of 3,600 lbs.

The show of fruits, was highly creditable to the section, indicating that the soil and climate are well

adapted to their production. We have never seen finer specimens of apples than were exhibited by Mr. Richards of Panton, Mr. Chapman of Middlebury, Mr. Burroughs of Vergennes, and Mr. Smith of Whiting. They comprehended the varieties of Baldwin, Spitzenburgh, R. I. Greening, Porter, Peck's Pleasant, Jewett's Best, Twenty-ounce, &c. There were also fine specimens of the Bartlett, Beurre Bosc, and Seckel pears, shown by Mr. Jewett and Mr. Smith. Good specimens of the Isabella, Winne, and several varieties of exotic grapes, were shown by Dr. Merrill of Middlebury, Mr. White of Vergennes, and Mr. Smith of Whiting.

"Small Potatoes" for Planting.

Eds. Cultivator—In your paper for January, 1849, I found an article, from which the following is an extract. You will re-publish the extract here, or not, as you think best. I think your readers may be benefited by having their attention turned to the subject again:

"*Eds. Cultivator*—It has long been a prevalent opinion with our farmers, that seed potatoes should be selected from the largest and best. But a gentleman of my acquaintance, the owner of a large farm in the county of Worcester, in the spring of 1847, found his stock of large potatoes completely exhausted, and from the general scarcity could not renew his supply. He then determined, from necessity, to plant his fields with small ones, varying in size from a marble to a small pullet's egg, placing two or three without cutting, in each hill. The result was an unusually fine crop, in size, quantity and quality.

In the spring of 1848, he repeated the experiment, so far as to plant alternate rows of small ones and large ones, cut into four or five pieces. I was present when he was harvesting the crop, in the early part of October, and it was evident that the produce of the small potatoes exceeded that of the larger ones. Should further experiment confirm the fact, that the small are of greater, or even of equal value for seed, it will be of some importance to farmers. M. B.

Beverly, Mass., December, 1848."

As the writer says—"It has long been a prevalent opinion with our farmers, that seed potatoes should be selected from the largest and best." But who has before made a fair experiment to ascertain the facts? Since reading what your correspondent published, my attention has been turned to the subject, and held to it, by my observation and experience in cultivating the sweet potato. It is the common practice, as far as my observation extends, to save and use the smaller of the sweet potatoes for planting. And from five years' experience and observation I have obtained no evidence that the practice causes deterioration, as to size or quality.

During the past season I have made an experiment with other potatoes, using the kind, or variety, called the Neshannock, or Mercer. Side by side, on ground treated alike, and of like quality, as far as it was possible to have it, we planted large potatoes and small ones, separated from each other. Both were planted on the same day, tilled on the same days, and harvested on the same day. The result is, quite as large an amount, and quite as good quality, from the small potatoes used in planting. Our son, M. M., in my absence, dug an equal number of hills, in parallel rows, and called on me to decide between the heaps. I decided without hesitation, as to the amount and size. His mother was then called on, and her ready decision agreed with mine. Our decision was in favor of those which he said were dug where the smaller were planted. We then went on and dug the whole. The result agreed with the appearance of the heaps first dug.

It might seem to some like exaggeration if we should say the potatoes were more and better from the small ones planted. We say that the quantity was not less. We think the proportion of small potatoes *was* less from the small potatoes planted, than from the large ones.

There is not the slightest ground for conjecture that any mistake has been made. My own eyes have been on the work, and my own hands in it, from beginning to end—with the exception of the digging of the hills in the parallel rows, by my son, as before mentioned. At the time of planting, the stakes were set, and the facts were written down. All has been done with a carefulness that leaves not a doubt.

It is proper to say here that the contrast in the size of the tubers planted was decided. I think that not more than one fourth, or at most one third, of the amount in weight, was planted where the smaller were used. Of the large, only one potato was used in a hill, the hills being about three feet apart each way. Of the smaller also only a single one was used, except with the smallest, when two were used, the hills being at the same distance with the others, about three feet apart each way.

The subject is worthy of attention. If equal quality and quantity can be produced, on equal ground, from the smaller of the tubers, it is time to have it known. Hitherto it has been thought to be otherwise. I confess that I am now looking for more general experience to confirm us in this new view. In propagating plants from seeds, I should still say, all other things being equal, let us have the largest seeds. But propagating the potato from the tuber, (or what one writer has called a sprout, and others would perhaps call a germ,) is another process. If we can obtain as good a plant from the smaller tuber as from the larger one, it is what we all need to know. I need not enumerate the advantages. They are apparent. Orson S. Murray.

Fruit Hills, Warren co., O., Sept., 1850.

The Season in New-Hampshire.

Eds. Cultivator—The season thus far, has been an extraordinary one. May was extremely wet, so that a great deal of planting had to be done in the first and second weeks of June. Whatever was planted then came up quick and grew rapidly. Haying was fairly commenced about the fifteenth of July, and from that time until the middle of August, there were but ten *good* hay days. There has been a large amount of hay ruined, but the crop was very large. A gentleman who lives about thirty miles north of here, told me the eleventh day of August, that they had then had but four days of good hay weather, and that all the low mowing land was full of water, and consequently much grass must be left uncut. Grain as a general thing is good and it was secured in good condition. Corn has ripened well. Owing to the lateness of the season a smaller and earlier kind was planted in numerous instances, and also less planted than there otherwise would have been. So that I should think the crop would be below the average. *Potatoes are badly diseased.* In all directions is heard the same general complaint. There will not be more than half a crop, and perhaps not more than a third. The *rot* is not of the same character as that which

affected the potato a few years since. Then the tubers affected grew black and hard, now they turn a kind of palish red, and then grow soft. We have had much wet weather, with sudden changes, and a great deal of harsh wind. If this has not been the cause of the disease, I think it has greatly aggravated it. The potato tops began to decay about the first of September, those planted the middle of June being affected as soon as any. The disease is developed the most on wet lands; in some instances whole fields are not worth digging. Other vegetables have done well and there is a good supply of fruit. W. L. Eaton. *East Weare, N. H., October* 8, 1850.

The Farm of J. Bennett, Esq.

Eds. Cultivator—I was much gratified by a recent visit to the farm of J. Bennett, Esq., in the town of Mamakating, Sullivan co., N. Y., and having found much to admire and approve, I know nothing which I can furnish for the columns of your excellent journal, that may be as useful as an account of some of the practical operations of this intelligent, skillful, and long experienced farmer and horticulturist.

Mr. B.'s farm is situated on the east side of the Shawangunk mountain, near the top, which range passes through the county, and at an elevation of some hundred feet above the plain below; but the slopes are so gradual as to admit of easy cultivation, and are not liable to be gullied or washed by rains, and there is a most lovely view, from that portion of the farm situated on the top of the mountain, of the surrounding country. To the west the view is extended over Sullivan county to the Deleware river, a distance of 40 miles—eastward, to the highlands below Newburgh, through which flows the beautiful waters of the Hudson, at a distance of 26 miles; while beneath lies, spread out with their fertile fields and groves of woodland, the counties of Orange, a part of Ulster, Dutchess and Rockland.

The soil of Mr. B.'s farm is composed of loam mixed with the debris of slate, and is very productive in all the different kinds of grains, vegetables and grasses, and his mode of farming is to manure well and till well. And his theory is, as it should be that of every farmer, that one acre well cultivated is better than two half done, both as regards the labor and its rewards. His farm, and those in that vicinity, are celebrated for being the best dairy farms in the state, generally yielding from two to two and one half, and sometimes three firkins of butter to the cow during the season, which is attributable, in the first place, to the selection of the best breed of stock for that purpose; secondly,—to not over-stocking—only keeping so many as can be well fed; thirdly, a bountiful supply of good water, from springs which gush forth from the mountain side; and lastly, skillful and judicious management in butter making.

As a fruit grower, Mr. B. is amongst the foremost in this section of the state. He has a large apple orchard, grafted with the most approved varieties. I was shown by him, an apple tree on his farm, which is rather extraordinary in size; it measured 10 feet in circumference, at the trunk, and the branches extend each way from the body about 60 feet; it is in a vigorous condition, and produces a good crop of good quality. He also has a peach orchard of about 800 choice trees, together with an assortment of pears, plums, cherries, &c., most of which have been grafted and budded by himself. He has a mode of propagating the peach which was new to me, as perhaps it may be to most of the readers of the Cultivator, which is as follows: At the time of transplanting a peach tree in the orchard, he also plants two plum trees of less size than that of the peach, one on each side directly opposite each other and at a distance of about 6 inches from the peach, and when the three are firmly set in the earth, cuts off the plum trees at a distance of about one foot from the ground, with a sloping cut of about 3 inches in length; he then bends the plum stocks, bringing them with the sloping cut directly against that of the peach stock, at the same time getting the size of the slope cut; then removes the bark with a sharp knife from the peach tree, to suit the slope cut already made on the plum stocks. This done, the parts are brought in a close connection, and tightly bound with bass matting and waxed over with grafting wax. The tree is staked and tied to prevent the wind moving it. The time of performing the operation is at spring transplanting. I was shown some which he had treated as above described, which, on examination, I found firmly united together, and in a vigorous and healthy condition, and he is of the opinion that in case the peach worm should injure or destroy the peach tree at the root, the plum trees will act as life preservers.

Mr. B. is also very successful in grafting the grape. Instead of performing it in spring, as generally recommended, he prefers the month of November. He then takes any of our native sorts for stocks, saws them off close to the ground, and inserts them in the usual mode of cleft grafting; then covers them with earth and lets them remain until the next spring; the earth is then carefully removed, and nothing more is required to be done. R. H. Drake. *Bloomingburgh, Sullivan county, N. Y., Aug.*, 1850.

Washington County (N. Y.) Fair.

Eds. Cultivator—The tenth annual Fair and Cattle show of the Washington County Agricultural Society, was held on the 18th and 19th of September, at the village of Argyle; and notwithstanding autumn, always represented as being so lovely, did not bless these holidays of the farmer with her usual brilliant sun, still the attendance on both days was immense. The tent was finely filled with fruit, the products of the dairy, domestic manufactures, the best vegetables from the garden, the handiwork of the fairer sex in the shape of counterpanes, coverlets, &c. &c. While passing over the useful, we must not forget the ornamental, for the tent was profusely decorated by skillful hands with Flora's rich gifts. The grounds adjoining the tent, were covered with farming implements, fine vehicles and stock, which would probably compare favorably with that of any other county of the State.

The plowing match took place in the forenoon of the second day, and was entered into by several competitors with avidity. Only two varieties of plows were used, that of Eddy & Co. of Union Village, and N. C. Northup & Son of Sandy Hill, the former of which took the first premium of the Society. An interesting address was delivered on the second day, by Le Roy Mowry, Esq., of Union Village.

Altogether this surpassed in interest, all previous fairs which have been held in the county, notwithstanding the opinion was predominant that it would be the last: that there was not sufficient ambition among the farmers of Washington county to keep up the society, and that it must consequently be

numbered among the things that were. But in this show we have been happily disappointed, for the proceedings of these two days have proved far different things. They have proved that the farmers of "old Washington" begin to think it will subserve their interests to support the Society, for they are fully aware that physical labor "per se," is not the only requisite to the successful cultivation of soil, and believe that it can only be made efficacious by bringing to its aid the light of science. FARMER.
South Hartford, N. Y., Sept. 21, 1850.

New Hampshire State Agricultural Society.

We had the pleasure of attending the first exhibition of this Society, which was held at Concord on the 2d and 3d days of October. Though the Society had been but recently organised, and the State had refused its aid, a liberal list of premiums was offered, and ample preparations were made for the Fair by its indefatigable officers, who had, we are happy to be able to say, the satisfaction of seeing all their anticipations, in relation to this first exhibition, fully realised, nothwithstanding the very unfavorable state of the weather during the first day.

Most of the preparations, as well as the arrangement of the articles shown under cover, were completed on Tuesday the first. The domestic Manufactures, Factory Goods, and Fruits and Flowers, occupied the large and well finished hall over the Concord rail depot, a room admirably adapted to the purpose, and which was well filled with fabrics of factory and domestic manufacture, highly creditable to the artisans and housewives of the Granite State, the whole arranged in a tasteful and judicious manner, so as to show to the best advantage. The show of Fruits was more extensive and richer in variety than we had anticipated, and proved conclusively that with proper attention to the selection of varieties, and reasonable care in the cultivation, the citizens of this State may supply themselves with an abundance of all the choice fruits of the northern States. Col. WILDER of Dorchester, and S. WALKER, Esq., of Roxbury, President of the Mass. Hort. Society, added to the interest of the exhibition, by the contribution of over one hundred varieties of pears. Another gentleman of Massachusetts, Mr. LAKE of Topsfield, exhibited one hundred and thirty varieties of apples, pears, and peaches. Among the apples, were samples said to have been taken from a tree on the farm of Peregrine White, the first white child born in New England, and which tree was planted by him. They were sent by Miss Sybil White, a direct descendant, who now resides on the ancestral farm in Marshfield. The show of flowers was meagre, indicating that but little attention had been given to floriculture, or that untimely frosts had occurred. There were, however, a few very pretty bouquets and floral designs.

In a large warehouse near the depot, were placed the Butter and Cheese, Vegetables, Grains, &c. The exhibition of the products of the dairy, was small. The Cheese appeared well, and there were some samples of superior Butter, several of which were made by girls of from 14 to 18 years of age. There were also fine samples of Honey and Maple Sugar. Of Vegetables, there was a good show, and amongst them specimens of "Marrow Squashes" and "New York Red" potatoes from the farm of ex-Gov. HILL, who raises both these articles extensively, and finds them to pay handsomely. Better samples of Indian corn we have seldom seen any where, than were exhibited by Mr. NESMITH, President of the Society, Gov. HILL and JOSEPH ROBINSON of Concord, Mr. CATE of Northfield, and Mr. BURBANK of Boscawen.

There was but a moderate collection of farm implements and the products of the shop, which were arranged in the car-house, adjoining the depot—among them we noticed two beautiful and substantial ox-yokes which were made by an ex-Governor of the State, Hon. JOHN H. STEELE of Peterboro', and for which he received the second prize.

The exhibition of live stock, which occupied a favorable position in a field of ten or twelve acres in the rear of the depot, was, for the first, extensive and highly creditable, especially in sheep. Superior Saxonies were exhibited by Messrs. David Buffum of Walpole, J. N. Sawyer of Salisbury, Hodgskins & Kingsbury of Walpole, and Messrs. Sibley and Barnard of Hopkinton. Merinoes by Messrs. Barker of Enfield, Melvin of Weare, Sawyer of Salisbury, Miller and Dewey of Hanover, Walker of Claremont, and others; and F. A. Wier of Walpole showed some good Cotswolds. Of Swine, there but few in the pens, and we noticed but one, a Suffolk boar, exhibited by Mr. James Wilson of Pembroke, worthy of special notice. Of Horses, there was a good display, but the rain prevented such an examination as would enable us to speak of them individually. Among the horned Cattle, the natives exceeded all others in numbers, and they showed we think, that far less pains have been taken by the farmers of New Hampshire to improve their cattle by introducing well bred foreign stock, than by the farmers of Massachusetts and Connecticut. There is evidently great room for improvement in this respect; and we were glad to see a fair show of Devons, some Durhams, and a few Ayrshires on the grounds, showing that at least some of the exhibitors were beginning to realise the necessity for improvement. Robert Elwell of Langdon, E. M. Dunbar of Warner, L. Brooks of Charlestown, David Buffum of Walpole, and S. G. Wadleigh of Meredith, were the principal exhibitors of Devons, and they had some good specimens of this favorite breed. Durhams were exhibited by Messrs. J. S. Walker and Isaac Hubbard of Claremont, C. E. Starkweather of Walpole, and some others; of Ayrshires we saw but one lot. There were some good cross bred animals. There was one team of 15 yoke of oxen, from Boscawen, among which, and the single yokes, were some fine animals. The show of poultry was quite extensive, embracing most of the fancy varieties—among them a pair of hens hatched from one egg, each minus a wing, so that they appeared when placed together, like a double hen.

A public procession was to have been formed at 2 o'clock on Wednesday afternoon, to march to the Capitol, where the address was to be delivered; but this procession was dispensed with on account of the rain. The wet, however, did not prevent the large Hall of the Capitol from being well filled; and as we looked upon this assemblage of the sturdy farmers of the Granite State, the reflection forced itself upon us that these were the men to carry forward, by their intelligence and energy, the good work which they had commenced under circumstances at first dubious but now in a high degree auspicious. On the platform with the President, were the Speaker, E. P. PRENTICE, Esq., President of the N. Y. State Ag. Society, Hon. LEVI WOODBURY, ex-Governors HILL and STEELE, Gov. DINSMOOR, and others. The meeting was called to order by Mr. NESMITH, the President of the Society, who, after prayer by Rev. Dr. BOUTON, gave an account

of the organization of the Society, which took place at a meeting of a few public spirited individuals the past winter. Application was made to the Legislature for aid, and a bill making a suitable appropriation passed the House of Assembly unanimously, but was lost by a tie vote in the Senate. He thought, and justly too, that the present fair, undertaken and carried into successful operation by the farmers themselves, would have a favorable effect upon the next Legislature. In conclusion the President said, that in looking for a model institution, from which to pattern theirs, they had fixed upon that of New York, and that they had selected and invited one of its members, the Hon. J. P. BEEKMAN of Kinderhook, to address them on this occasion.

After the applause which this announcement elicited, Dr. BEEKMAN commenced his address, in which he gave a history of the rise and progress of the N. Y. State Ag. Society, and the effect it has had on the prosperity of her citizens. He pointed out the small beginning of this now powerful institution,—paid a deserved tribute to the memory and labors of the lamented BUEL, and to the influence of the Agricultural press—stated the discouragements under which the Society labored for years, but which were finally overcome by the determined perseverance of the few who looked forward with confidence to the success which has now crowned their labors. He described the progress which had been made in Agricultural improvements during the existence of the Society, and thus encouraged his audience to press forward in the laudable efforts which they had now so auspiciously commenced, until the influence of their Society should be extended, as was that of New-York, over the whole state.

On motion of Ex-Governor STEELE, the thanks of the Society were voted to Dr. BEEKMAN for his Address, and a copy asked for publication.

In the evening, the hall was again crowded, to hear remarks from all who chose to address them. The meeting was opened by the President, who reminded the Society that there were present a great number of practical farmers, whom they wished to hear, and expressed the hope that the brief time that they could devote together to the interests of the great cause of agriculture, would be every moment improved.

The meeting was successively addressed by Gov. Steele, Judge Woodbury, Gov. Colby, Mr. Cooke of Keene, Mr. Briggs of Ohio, Gen. Pierce of Concord, Mr. Sawyer of Piermont, Dr. Martin of Dover, Col. Berry of Hebron, and several others. The remarks of several of these gentlemen, proved that as farmers they would compare well with the best farmers in the country, and that their lands, as they should do, were, by an intelligent practice, growing more productive each succeeding year. This is the true course. No man can be justly called a good farmer who permits his land to deteriorate. The meeting was altogether, a very interesting one, and we doubt whether there was one farmer present, who had not, before it broke up, formed the determination, so necessary to useful progress in any branch of industry, hereafter to improve the advantages within his reach, better than he had ever done before. We would gladly copy largely from a report of the speeches, furnished by a correspondent of the Boston Traveller, did our limits permit; but we must close with a few brief examples of what has been done, by way of encouragement to those who are disposed to see what they can accomplish.

Gov. STEELE said he had been but five years a farmer, and commenced upon land which had been reduced to the lowest degree. As he was altogether unlearned in the art, he resorted to agricultural books for practical knowledge. He attributed his success in bringing his land from almost barrenness, to a highly productive state, to deep plowing and liberal manuring. My practice, said Gov. S., has been to plow deep, and when time will admit of it, to subsoil, and always with good success.

Gov. COLBY said he was a farmer by profession, and was happy to meet with his brother farmers to receive and impart instruction. He had raised this year forty tons of hay from twenty acres, and thirty tons from twenty acres more. This is pretty good, but his land could do better, and he wanted to know how it could be made to do it at the least cost. He had raised wheat for six years upon plowed green-sward, and never failed of having a good crop and good wheat. He lived in a hilly region, where the wind blows, and no insects affected his wheat. The weevil can't live there, and this was an axiom with him, if you would succeed in wheat, raise it where the wind blows. His carrots this year yielded 800 bushels to the acre; and he considered them the best roots to raise for stock—better by far than potatoes.

Mr. SAWYER of Piermont, explained the mode by which he was enabled to raise his own wheat, which was to top dress his land in the fall with lime compost, and he never failed, his crops averaging from 15 to 25 bushels per acre. He thought that the great amount of money paid for flour brought into the state, should be retained at home, and all that they had to do, was just to turn about and raise it for themselves. "Out of the abundance of our land," said Mr. S., "we want and should have, for agricultural prosperity, more small farms. Let every young man have one. Farms of 200 or 300 acres may profitably be divided into 4 or 5 farms, and each acre could then be made to produce three times its present yield. This is the true policy for New England, and by it we shall excel in agriculture, as we now excel in industry and energy. Let us resolve that everything we touch shall bear the mark of improvement, and we can double our wealth, and sustain double the population upon our soil."

Col. BERRY of Hebron, related his experience with a "field that he bought some years ago. When purchased, it was entirely reduced, and the whole value of the crop upon it was not worth $15. In the spring of the year, I drew out of the field one hundred and twenty loads of stumps. I then run the plow through it in every direction, driving it to the beam. I manured two acres, and planted it with corn and potatoes. My crop was decent. I plowed and manured again, and sowed to grass and oats, or wheat. I have this year gathered large and profitable crops, but like Gov. Colby, I want to know how I can make that field produce more."

As we left Concord on Thursday morning, we cannot speak of the transactions of the last day; but we learn that the attendance was large—estimated at from eight to ten thousand; and that the exhibition was closed up in a manner most gratifying, both to the public and to the officers of the Society, who,—especially Mr. NESMITH the President, Mr. WALKER, the Secretary, and Mr. BAKER the Treasurer,—deserve great credit for the success which has crowned this first exhibition of the New-Hampshire State Agricultural Society. May still greater success attend their future labors.

Westchester County Ag. Society.

The annual exhibition of this society took place at Tarrytown on the 9th, 10th, and 11th of October. The general display was less extensive than had been anticipated; owing, probably, to the location being on one side of the county, not conveniently reached from the other portions. The number of animals was small, and with a few exceptions they were only of ordinary quality. Of cattle, most of the breeding stock was of common or mixed blood, whose appearance did not indicate extraordinary value for any purpose. We noticed a very good fat ox, four years old, a cross of the short horn breed, owned by Motte Underhill, Westchester. There was, also, three yoke of good working oxen. There were a few good sheep—long wools and South Downs. Among the former we noticed specimens offered by Dyckman Odell and Saml. Acker, Greenburgh, and Daniel Jepson, Yorktown. Of swine, there was a very large and well shaped sow, resembling the large Lincolnshire breed, owned by Ira Miller, and a Berkshire boar, showing the peculiar points of that breed, owned by P. R. Paulding, Tarrytown.

There was a respectable show of fruits, consisting of apples of the popular kinds for late keeping, a few choice pears, and a very handsome show of grapes. The latter were chiefly from the extensive vineyard of the President of the Society, Dr. R. T. Underhill, at Croton Point. He informed us that he has twenty-five acres in grape vines—twenty of which are devoted to the Isabella variety, and five to the Catawba. The Isabella has ripened a good crop the present season, though in many instances there is complaint of a failure in this respect. The Catawba is always more uncertain than the Isabella, throughout our section of the country, but Dr. U. thought his would ripen quite well, if the mild weather continued till the 16th. These two kinds constitute his main crop, though he cultivates others on a small scale, by way of experiment, and to test their adaptedness to his purposes. His grapes are sold in New-York, at eight to ten cents per pound.

The American Institute held its trial of plows, plowing match, and spading match at Tarrytown, in connexion with the show of the Westchester county Society. The competition, both in the trial of plows and plowing match was quite small—only five plows owned by three men, having been entered for trial, and only three plows for the plowing match. In the trial of plows, the specifications for the size of furrow, were given as follows: 1st, sixteen inches wide, eight inches deep; 2d, twelve inches wide, six inches deep. In regard to the propriety of plowing sixteen inches wide, we may have a word to say another time. What were the rules in reference to the awards on the plowing match, except that the furrows were to be six inches deep we are not informed.

A sub-soil plow was exhibited, (not for premium.) by Mr. Samuel Allen, of New-York, who, though passed the age of three-score and ten, showed the operation of this valuable implement, under the guidance of his own hands.

There were four competitors in the spading match. The ground was divided into lots twenty feet long and ten feet wide, and one hour was allowed for the completion of the work. All the lots were finished within the time, and the quality of the work on two of them, was of the best character—the soil being thoroughly pulverized to the depth of from ten to twelve inches.

Addresses were delivered on the show-ground, before large and highly respectable audiences, on the 10th and 11th, by Dr. Gardner, and by Gen. Dix. Both addresses were able, and creditable to the distinguished speakers, but as they are expected to be published, we will not attempt a particular notice of them here.

From what we saw of Westchester county, in our excursion through a portion of it, we should conclude that the agriculture of several neighborhoods was considerably improving, and it is presumed that these examples will be a strong stimulus to further progress. The proximity to New-York, and the means of reaching a market where all productions find a ready sale at good prices, offer great inducements to high cultivation, and we cannot doubt that a judicious course of farming would be here followed with the most satisfactory returns.

Drainage of Soils.

Fancy a soil full of water, so that any rain which falls on it, just rolls over the surface into the next ditch, without getting into the land. The water in such a case, by excluding the air, will sour the land; it will convert what would have been good food for plants, into poison for them; but even supposing it did not do this, the plants would soon starve. For you must remember that a plant in the soil is just as a man would be who was chained, by the leg, to one place in the larder. The larder may be full of food, but as soon as the man had eaten all that was within his reach, he would starve, though in the midst of plenty; that is he would do so if there were not some contrivance in operation for carrying the different dishes by him as he stood, so that he might take a bit here and there as they passed, just as he chose. Now, in a well drained soil, the rain water is just such a contrivance as this. It dissolves out the mineral part of the soil, and carries it by the roots of plants, so that they may take a bit here and a bit there, as they choose, and thus they are fed; but if the land be not drained, the water soon fills it, and then no more rain will sink in, and the water is stagnant in the land—there is no current through it—the dishes in this larder are lying still on their shelves, and as soon as the poor plant has eaten up all the food around it, (even supposing it to be food and not poison,) it must starve, for it cannot go about after its food like an animal; it is like an animal chained by the leg; it is stationary, and must die if food is not brought to it. The use of draining is to keep the soil so that rain shall sink through it and feed plants. Abundance of water is a good thing. What is more fertile than a water meadow? But then it must not be stagnant water, which keeps the food of plants away from them, or converts it into poison. It must be water in motion continually carrying food to the roots of plants, as in a water meadow or that on a well drained field it does. *Ag. Gaz.*

Method of Skinning Calves.

As most dairymen are in the habit of killing their calves as soon as the milk is good, and as buyers of skins have frequent occasion to complain of cuts and hacks, I give the following method of skinning. First rip the skin as usual, and start it from the fore legs and neck, sufficient to fasten a small chain around the neck of the skin, and with another, chain the neck of the calf to something permanent, and with a small windlass attached to the side of the barn or something where you wish to do your work, draw off the skin by means of small levers or arms of your windlass. G. A. Hanchet.

Poultry Exhibition in Boston.

A Society was organized at Boston, last year, called "The New-England Society for the Improvement of Poultry." Its first exhibition was held in Boston, in Nov. last; and its next exhibition was ordered to be held at Boston on the 12th of this month. But it seems some gentlemen about Boston determined to get the start of the "Improvement Society." The latter part of Sept. anonymous notices were issued, for an exhibition of Poultry, to be held at Boston the first week in October. Many supposed that this call came from the original Society, but its officers disclaimed any connection with it. This extemporaneous exhibition, however, proved to be no trifling affair. Being in Boston at the time, we paid it a visit, and were surprised to find the very large hall (the largest we believe in Boston,) over the Fitchburg Railroad Depot, well filled with coops of poultry, embracing almost every variety to be found in New-England. Two-thirds of the birds consisted of the different sorts of Chinese fowls, known there as the Cochin Chinas, Shanghaes, Chittagongs, &c., &c. These fowls, now all the rage, are, most of them, a long-legged and long-necked race, with little, we should think, to commend them to public favor, save their great height. Beside these, there were White Dorkings, Black Spanish, Black, Golden and Silver Polands, Bolton Greys or Creoles, Wild India, Game and Yankee Game, and Bantams of all sorts, except the very best, together with a host with names not to be found even in the most modern Poultry Books. For our own use, we should have selected from the whole lot, the White Dorkings and Black Spanish, with perhaps some of the varieties of crested fowls. There were but few Turkeys and Geese on exhibition—a tolerable show of Ducks and Pigeons, some few cage-birds, a pair of Golden Pheasants, and one English Pheasant. Presuming some of our readers will be glad to know where the different varieties of Poultry can be had, we annex a list of the Premiums awarded:

First premium, for six best fowls, George P. Burnham, of Melrose, Mass., $10.
Second premium, for six second best, C. B. Marsh, West Roxbury, $6.
For 3 best Cochin Chinas, G. P. Burnham, Melrose, $5.
For 12 best Chickens, this year's growth, G. P. Burnham, Melrose, $5.
For 3 best Shanghaes, Gilman Brackett, Newton, $6.
For 3 best Dorkings, Eben. Wight, Dedham, $5.
For 3 best Game Fowls, O. M. Stacey, Lynn, $5.
For 3 best Black Spanish, Francis Blake, Newton, $3
For 3 best Black Bantams, John Fussel, Roxbury, $4.
For 3 best Chittagongs, G. W. George, Haverhill, $4.
For 12 second best Chickens, Marsh stock, H. H. Williams, Roxbury, $4.
For best pair Turkeys, Theodore Drew, Plymouth, $4.
For 3 best Golden Polands, spangled Hamburgs, A. H. Hale, Rockport, $4.
For 3 best Black Polands, T. G. Morrell, of Georgetown, $4.
For 3 best Bolton Greys, George Dorr, Dorchester, $3.
For best lot of Geese, Dr. W. G. T. Morton, Needham, $4.
For best lot of Ducks, Sidney Packard, Bridgewater, $3.
For Fancy Pigeons, G. P. Richardson, Brookline, $3.
For 2d best Fancy Pigeons, G. W. Boynton, Georgetown, $2.
For best Cage of Canaries, Mrs. J. Merrill, Lowell, $4.
For 2d best do., F. A. Bartlett, Boston, $2.
For best general lot of Fowls, Pearce & Osborne, Danvers, $4.
For specimens of Marsh stock, Capt. F. Alden, Dedham, $4.
For specimens of Javas and White Shanghaes, Parker & White, Boston, $3.
For best do. Perley stock G. W. George, Haverhill, $4.
For 2d best lot of Chickens, Cyrus Smith, Brookline, $3.
For specimens of Shanghaes, Forbes stock, H. B. Coffin, Newton, $3.
For specimens of Wild India and Yankee Game, Dr. Bennett, Plymouth, $5.
For specimens of Forbes Shanghaes, S. & G. Hyde, Newton, $3.
For specimens of Fowls and Ducks, E. C. Thayer, of Braintree, $3.
For the 2d best specimens of Black Spanish, Pearce & Osborne, Danvers, $2.

☞ The regular exhibition of the New-England Society will be held in Boston on the 12th and 13th of this month.

Deferred Notices.

The following notices of articles exhibited at the State Fair were omitted last month for want of room.

Iron Carriages.—Messrs. Allen & Moody, of Troy, exhibited a beautiful buggy, made wholly of wrought iron. The frame, spokes and rims of the wheels, thills, &c., were of wrought iron rods, of sizes corresponding to their uses. In some instances, as we were told, hollow pipes, such as are used for gas-pipes, were used. The carriage presented a very neat and at the same time firm and substantial appearance. Its price was $110. Messrs. A. and M. make several descriptions of carriages on this plan.

Vegetable Cutter.—The vegetable cutter offered by E. and N. Hallock, Milton, Ulster county, was one of the best and most simple contrivances of this kind that we have seen. It works easily and with great despatch—one man being able to cut with it a bushel of turneps in half a minute. The slices are about three quarters of an inch thick and an inch wide, so that no animal can choke with them, and they can be easily eaten by sheep or other stock.

Oscillating Roller Axle.—This is an invention of S. H. Mix, Esq., editor of the Schoharie *Patriot*. To the ends of the axle are attached, by means of a frame, small wheels or rollers, which play within a circle, in the centre of the carriage wheel, and receive the bearing of the load. By these rollers, it is designed to avoid the friction which is produced by the axle playing in the common hub. The principle is similar to that in anti-friction rollers used for large grind stones, &c. A farm wagon, with this kind of axles, was exhibited, and a very favorable opinion was expressed by farmers and others, in regard to its advantages for conveying heavy loads.

Grain Drills.—Several excellent machines of this kind were exhibited. We noticed those made by P. Seymour, East Bloomfield, Ontario county, J. Ganson & Co., Brockport, Monroe county, N. Y., and Wm. Croasdale, Philadelphia, Pa. They are all well recommended, and their relative merits could not, probably, be precisely ascertained, without actual trial.

Cast Iron Mantels.—These were invented by Hiram Tucker, of Boston. Several specimens of the articles were exhibited by Francis Harvey, Albany. They are of beautiful design and finish, and in elegance of appearance, cannot be surpassed by the finest marble, which they are made to resemble. Their durability, cheapness, and beauty, will cause them to be substituted to a great extent for the more costly marble.

Bingham's Extension Ladders.—These were exhibited by S. Bingham, of Troy. The ladders are carried on a pair of wheels, and by means of very simple machinery, moved by a crank, may be quickly and easily raised to the required height.

Elastic Bottom Bedsteads—*Hinkley's Patent.*—These were exhibted by A. Adams, Troy. The bottom consists of wooden slats, made in the usual form, fastened in their places by wires which are twisted around their ends. The wires are attached to the four corners of the bedstead, thus forming an elastic bottom.

A hand used in measuring the height of horses, is four inches.

Fair of the American Institute.

The exhibition of this association for the present year, is thought to have been superior, in several respects, to any previous one. There was a larger collection of machinery and articles of a strictly useful character, than is usually seen here. Among the articles of this kind, we noticed very powerful iron shears, on the principle of Dix's Anti-friction Press, which we understood were designed for exhibition at the World's Fair at London, next year. A steam engine of new and simple construction, was offered by M. P. Coons, of Lansingburgh. King's Railway Washing Machine, also offered by Mr. Coons, appears to be an improvement. Grimes' Improved Cooking Closet, by which baking, boiling, roasting, washing, and ironing may be carried on at the same time, appears to be an economical apparatus.

Good assortments of agricultural implements were exhibited by A. B. Allen & Co., and John Mayher & Co., New-York.

The show of animals was held at the Madison Cottage on the 16th and 17th of October. The display of the different kinds of stock, though not large, was decidedly better in quality, in most of the classes, than we have before witnessed here. Horses were quite numerous, though most of them were too long-legged and too loose made to suit our notion of what horses should be for service and endurance. A compact and heavy Norman horse, bred by Mr. Harris of New-Jersey, was shown by C. F. Howell, Astoria, L. I.

The cattle comprised specimens of Short-horns, Devons, Ayrshires, Alderneys, one Hereford, two Hungarians, and a large number under the denomination of "grades," consisting of mixtures of the various imported and common stocks. There were but few full blood short-horns. A good bull, "Earl Seaham," was shown by Sherwood & Stevens, and a good cow and several young animals by Mr. Vail, of Troy. Seven imported Devons, of various ages, were shown by Ambrose Stevens. They were from the celebrated herds of Messrs. Quartly & Mercer, Devonshire, England, and are most beautiful stock —combining size, substance and symmetry in a remarkable degree. W. P. & C. S. Wainwright, of Rhinebeck, exhibited four fine Devons. They were from the herds of Messrs. Baker and Geo. Turner, of Devonshire. The bull, four years old, is a superior animal. A good bull and cow were shown by J. N. Blakeslee, of Connecticut.

R. L. Colt, Esq., Paterson, N. J., exhibited Ayrshires, Alderneys, and Hungarians. Among the "grades," were several excellent milking cows. We noticed as particularly good those offered by Thomas Bell, (the same which were at our State Fair,) and those offered by James Bathgate, a cross of the Ayrshire and Durham, and those of R. R. Morris, a cross of the Holstein and Durham.

There were several good fat cattle. The beautiful red ox, four years old, purchased by Mr. Bell of Mr. Wadsworth at the State Fair, is as fine as ever. Mr. B. has had the misfortune to lose his mate, having been over-heated on his way to Mr. B.'s farm. A pair of very heavy oxen, of good quality, was shown by John J. Coapman, Poughkeepsie. We saw but one yoke of working oxen, and they were not remarkable for any good qualities that we could discover.

In respect to sheep, the show was very good. They were mostly long-wools and South-Downs, with a few Saxons and Merinos. The long-wools offered by Edward Hallock, Milton, Messrs. Bathgate & Bell, of Morrisania, were of good size and form, and strong constitution. There were several lots of excellent South-Downs, particularly those imported by Ambrose Stevens, and those offered by Edward Waite, Montgomery, Orange county, and D. B. Haight, Washington, Dutchess county. D. W. Catlin, of New-York, exhibited several Saxon rams and ewes, of the stock imported by him in connexion with C. B. Smith, of Connecticut. Good Saxons were also shown by Walter Wakeman, North-East, Dutchess county. J. N. Blakeslee & Son, and Mr. Thrall, of Connecticut, showed excellent specimens of Merinos.

Of swine, some fine Suffolk pigs were shown by Edward Hallock; and a first rate imported boar, thirteen months old, of Fisher Hobbs' Black Essex variety, was shown by Samuel Brewer, New-York. Several lots of white hogs, of a very large kind, called Lincolnshires, were exhibited.

There was quite a display of poultry, comprising several varieties of geese, white and dark colored turkeys, several kinds of ducks, and a large assortment of fowls of the *gallus* family, among which the Malay tribe, under the names of Cochin-China, Shanghae, and half a dozen other names, were prominent. The principal exhibitors in this department were R. L. Colt, Paterson, Wm. Moore, New-York.

Franklin Institute.

This old established Institute are now holding their 20th annual exhibition of American Manufactures, in the buildings called the "Chinese Museum," admirably adapted to the purposes of the exhibition. On the main floor as you enter, you find the machinery in operation—a display alike creditable to American artists and to the Institution. Several water rams are in constant operation, exhibiting their almost self-acting powers. Beautiful steam engines, some of miniature dimensions, are in operation—and the variety of articles in this room, is deserving of the special attention which they are receiving from a crowd of visitors. Two of Woodworth's planing machines are in this room. Many ingenious articles are on exhibition which, did not time prevent, would meet a special notice.

Adjoining this room, the stoves, grates, cooking apparatuses, &c., are exhibited in operation. Bread smoking hot, and cakes in like order, are being exhibited fresh from the ovens, and every desirable facility is here given to visitors to test the value of the different articles for actual use. The arrangements in this room exceed any thing I have elsewhere seen. Agricultural implements of various kinds are contained in the room first named. The No. of articles on exhibition in these rooms is 937.

From the stove room you ascend to the grand exhibition rooms above, being the main rooms of the exhibition. This immense room with its gallery is arranged in the most admirable manner, so that visitors have an opportunity of examining every article without the inconvenience so often experienced. By having the exhibition arranged in several apartments, the crowd of visitors is broken up, and no inconvenience from the throng is experienced. The show of cotton goods is most admirable. I noticed the articles from several N. Y. establishments, among others the New York mills Oneida county, who exhibited very choice *shirtings, cottonades, check gingham,* and *chambrays,* and from Benj. Marshall, Troy.

Of *woolen goods* the show is superb—some fine cashmeres from Seneca Falls, fine black cloth, Utica

steam mills. Some splendid long shawls, from James Roy & Co., Watervliet. The show in this department does great credit to American manufactures, as does that in carpet and oil cloths. The show of silks is also very rich. I have not time to notice the various miscellaneous branches of the show which are very extensive and do great credit to American industry and talent. The whole number of articles actually entered before the exhibition opened is 4,305. No articles are allowed on entry *after* the exhibition opens.

This exhibition is one of American Industry really. It is not made up of fancy articles to entrap visitors—but it is what it professes to be—and does great credit to the Institute, and from the encouragement it receives shows that the Institute may be sustained in the course they have taken to promote American manufactures and the mechanic arts, by an exhibition really useful, and without resort to mere articles of show, attractive only to the story tellers and lovers of sight seeing. J. *Philadelphia, Oct.* 19.

Harvesting Machines.

Eds. Cultivator—As a subscriber to your journal, I have to trouble your friends, of the *Prairie Farmer*, or some other individual, for some particulars respecting reaping machines. Three thousand five hundred machines, equal to the labor of seventeen thousand five hundred men! (Vide note in *The Cultivator* from the *P. F.*) How do you manage this? We are anxious to do things as cheap as possible. I pay nine to twelve shillings [about $2,75 to $3,00] an acre for reaping, binding and shocking my wheat—cut close to the ground either with the sickle or bagging-hook—a woman following each man to tie the wheat. Sometimes we use the scythe, but I do not like this plan, as a great deal of grain is scattered in the field, unless the men are very particular. In my case, where I have to harvest about two hundred acres, it cannot be well done by this mode.

How is the work performed with the reaping machines? Are horses used, and what will be the expense for an acre of wheat? What will be the outlay for the machine, and what time will it take to cut an acre? Is much straw left behind? Do women tie the corn, and has the land to be raked afterwards, or gone over with the sickle or bagging-hook? Is the wheat or other grain required to be free from weeds—as May-weed, thistles, docks, &c. This year, we were a good deal troubled with these pests—the season having been rather wet to harvest time. Wm. Dennison. *Manor Farms, Blackheath, London, Sept.* 15, 1850.

We shall feel greatly obliged if our friends of the *Prairie Farmer* or some of our Western correspondents will furnish us with the information asked for in the above communication. Eds. Cult.

Long Island Lands.

We would call the attention of our readers to the advertisement of Dr. Peck in this No. of the Cultivator, who offers a large tract of valuable land for sale, in the central portion of Long Island. These lands are now attracting the attention of persons desirous of settling in the vicinity of this city. And as the question, as to the productive quality is now entirely settled, there is no longer any doubt that these lands are as good as any new land on the Island. Dr. Peck deserves great credit for the manner in which he has brought this great portion of the Island to the favorable notice of the public, and as being the first to cultivate them to advantage, in the face of long existing opinions and prejudice, that these lands could not be cultivated, and were worthless for all uses of the garden or farm. Dr. P. introduced a new mode of clearing these lands, or new on the Island, by which the cost of clearing per acre has been greatly reduced from the old mode of *grubbing* out the roots by hand. This was, or is, simply by the use of a strong plow and harrow,—with these instruments Dr. Peck clears the ground without any difficulty whatever, and the success in cultivation is complete, as may be seen at Lake Road. The garden and grounds there will bear a favorable comparison with any garden or fields on the Island. *N. Y. Far. and Mec.*

Hose Coupling.

Eds. Cultivator—Having seen noticed an apparatus for coupling hose, in the September number of the Cultivator, and patented Mr. A. H. Brown of Albany, N. Y., I should like to state through the columns of your paper, that I invented, made and used, the coupling noticed, in the year 1841. D. L. Sykes. *East Suffield, Ct., Sept.*25, 1850.

Answers to Correspondents.

Temperature for Churning.—Y., Honesdale, Pa. Experiments have shown that for churning *cream*, the temperature should be from 50 to 55 degrees. If the milk is churned, or the milk and cream together, the temperature at commencing, should be 60 to 65 degrees. The thermometer churn sold by Emery & Co., of this city, is made double, leaving a space of an inch or more between the parts, for the admission of cold or hot water, as may be required to bring the cream to the proper temperature.

Propagating Forest Trees.—D. B. K., Washington Valley, N. J. Brief directions in regard to the propagation of those kinds of forest trees in most common use as ornamental trees, can be found in catalogues of nurseries, &c. It is best to plant the seeds of most kinds as soon as they are ripe, and before they shrink. If they are to be kept long, they should be packed in moss, and kept damp.

Slanting in Drills.—J. B., Annapolis, Md. Machines for sowing wheat in drills can be had at from $55 to $75. The seed is deposited in rows, nine to ten inches apart. The seed is dropped in a continuous line, using about two bushels per acre. Seymour's drill was described (with a cut) in our August number. Emery's drill is the kind chiefly used in this section for planting corn. It will drop the seed at any distance required, from four inches to six feet. The rows are from three to four feet apart, according to the size of the variety of corn. The price of the drill, fitted for working with a horse, is $14.

Syphon.—J. B., Willet, N. Y. We see no difficulty in raising water twenty feet in the manner you speak of, and we presume it will continue to run so long as the supply will fully fill the pipe, provided the pipe is perfectly air-tight.

Ice-house above ground.—M. C., Sperryville, Va. You will find a cut and description of an ice-house of this kind, in our volume for 1847, p. 345.

Gilmore's Apiary.—S. N. S., Hamden, Ct. You will best obtain the information you want in regard to this article, by addressing Mr. G. by letter, at Wayne, Me. He has a patent.

Notes for the Month.

Communications have come to hand, since our last, from A. K., D. M., A Farmer, D. L. Sykes, W. L. Eaton, One who intends to be a Farmer, Titrius, B. H. Nott, Prof. J. P. Norton, J. R. Howard, O. S. Murray, M. Cooper, A Subscriber, S. N. S., J., L. Durand, W. A. Ela.

Books, Pamphlets, &c., have been received, since our last, as follows:

Lectures on the General Relations which Science bears to Practical Agriculture, delivered before the New-York State Agricultural Society, by James F. W. Johnston, F.R.SS. L. & E., from C. M. Saxton, 123 Fulton street, New-York.

The New-Brunswick Almanac, and Register, for the year of our Lord 1850, from Dr. Robb, Fredericton.

Journal of the New-Brunswick Society, for the encouragement of Agriculture, Home Manufactures and Commerce, from Dr. Robb, Fredericton.

Transactions of the New-Haven County Ag. Society, for 1849, with an Address by Prof. John P. Norton, from L. Durand, Esq.

The Farmer's Guide to Scientific and Practical Agriculture, Nos. 8, 9, and 10, from Leonard Scott & Co., 79 Fulton street and 54 Gold street.

Thorburn's Descriptive Annual Catalogue of Bulbous Flowering Roots, with directions for their Culture and Management, from J. M. Thorburn & Co., 15 John street, New-York.

Minority Report on the Reduction of Letter, Periodical, and Pamphlet Postage, from Hon. Charles Durkee, M. C.

Catalogue of Fruit and Ornamental Trees, Evergreens, Flowering Shrubs and Plants, Roses, &c., cultivated and for sale at the Hopewell Nurseries, near Fredericksburg, Virginia, by Henry R. Roby, from the Proprietor.

Wire Fences.—We invite attention to the article on this subject by Judge Nott. We have visited his place, and seen the various kinds of fence described by him. His experiments have been very thorough, and have done much towards showing what *will not*, as well as *what will* answer the purpose. His fence made on the plan of a suspension bridge, anchored, or fastened as described, is much the most complete and effectual of any wire-fence we have seen. This mode has also the advantage that it may be made across rocks, or bogs, or even sheets of water, without inconvenience, being secured in its position by the weights at the bottom.

Seedling Pear.—We have received from Mr. S. Worden, of Minetto, Oswego county, N. Y., specimens of a pear called *King's seedling*. Mr. W. states that it was raised by Lorenzo King, of New-Haven, Oswego county, the original tree being now about twenty years old. It is described as a strong, upright grower, yielding large crops every year, and has never been in the least effected by blight. Mr. W.'s description of the fruit, which is as follows, appears to be quite correct: "Size, medium to large—has been known to weigh 14 ounces; color, greenish yellow, when ripened on the tree; flesh, melting, quite juicy, and very sweet, a little gritty at the core; skin, thick; season, the whole of October."

Seed Corn and Seedling Apples.—We have received from Mr. D. A. Buckley, Stone-Hill Farm, Williamstown, Mass., a handsome sample of Dutton corn raised by him; also two varieties of seedling apples, one sweet, the other, moderately sour. The former does not appear to possess any very valuable properties; the latter is a fair-sized, and pleasant apple, but not equal to some others ripening at the same season.

Wild Potatoes.—At the late exhibition of the Westchester county Agricultural Society, Mr. James P. Swain, of Eastchester, exhibited several kinds of potatoes, the original stock of which was procured from a forest in Peru, in 1847. The tubers were at first about the size of peas. They have been planted by Mr. S. three years, and with a manifest improvement in size, each year—several of those now exhibited being of ample size for culinary use. We were presented with specimens of three kinds—white, pink and blue, and shall have them carefully cultivated next season. We understood from Mr. Holmes, of Tarrytown, that the quality of some of them had been proved, and that they were equal to the best kinds known. They have thus far been entirely healthy, though planted in the same fields with others which have rotted. They are well worthy a fair trial.

Splendid Harnesses.—At the late State Fair, Mr. L. J. Lloyd, of this city, exhibited a gold-mounted harness, manufactured by him, which attracted much attention. All the materials used in its construction—the gold, silver, iron, &c., as well as the leather—were *American*. At the late Fair at Vergennes, Vt., a beautiful harness was exhibited, which, (with the exception of the mountings,) was not inferior in materials and workmanship, to any we have ever seen. It was labelled as follows: "From Lambert Maynard, Esq., Boston; a present for the Morgan horse Black-Hawk." We presume it will be preserved as a holliday attire for the noble steed.

Apples from Vermont.—Mr. H. C. Hunt, of New-Haven, Vt., has left with us specimens of Jewett's Best, Burroughs' Greening, Danvers Winter-Sweet, Tynmouth Sweet, and several kinds in regard to the proper names of which we are not quite certain. We will speak of the qualities of some of these kinds, with which we are not now acquainted, when they come into a fit state for eating.

Ohio State Fair.—This exhibition took place at Cincinnati, under the supervision of the State Board of Agriculture, on the 3d, 4th, and 5th of October. A very large number of people attended, and the general result, considering that it was the first attempt of the kind in the State, was highly flattering to the friends of agricultural improvement. We have, as yet seen no official account of the exhibition. A correspondent of the *National Era*, states that—"The whole receipts amounted to $7,285. The amount of premiums paid was $3,000. The total expenses were something less than $10,000, leaving about $3,000 to be supplied by State appropriations and private contributions."

Premium on Bread.—At the late exhibition of the Middlesex county (Mass.) Agricultural Society, a premium was given for the best bread. There were thirty-three competitors. After two hours spent in the examination of the different specimens, the premiums (two) were awarded to bread made by Irish girls.

Cure for Kidney-Worm in Swine.—A writer in the *Ohio Cultivator* states, that he cures this disease by giving the animal afflicted with it, one ounce of copperas daily, for six or eight days. He makes a slop of about two quarts of corn meal and dish-water; dissolves the copperas in a cup of warm water, then mixes the whole together, and gives it to the hog. If he does not eat it at first, he shuts him in a pen and gives him nothing else for several days, or until he eats it. He states that this treatment has cured the disease even when at several months standing.

Hay-caps.—E. Emerson, in replying to the remark made by the editor of the *Mass. Plowman*, that "no practical farmer will be very ready to procure hay-caps,"—says "I am a practical farmer—have used hay-caps for years; they have saved

me ten times their cost. In practice I find that a cock of hay may stand out through a storm of a week under a good cap, and receive no other injury only what it receives from the wet ground. From practice I find that the winds have not blown hard enough for the last four years, when I had hay-capped, to blow over a cock with a cap on it. From practice, I find that the caps may remain on after a rain, just as long as you wish to have them, and not injure the hay. You may just as well say that a man must remove his umbrella after a showes as his caps. I have never had a cock of hay as much wet, through a cap, as it would be by a heavy dew without a cap."

SCHOOL OF APPLIED CHEMISTRY.—We would invite particular attention to the advertisement of this School, which is under the charge of Prof. NORTON, Yale College. It will be seen that the fourth course of lectures on Scientific Agriculture, will commence in January next, and we trust that many of our young men will embrace the opportunity here offered, of acquiring a knowledge of those sciences and principles on which the art of husbandry rests. Prof. NORTON is a sound, practical, and thorough teacher, and one who has been eminently successful in that vocation, as well as in the results of scientific investigation. The number of students attending his lectures, increases with each successive course, and several of those of former classes have obtained desirable situations as instructors in various institutions.

SALE OF LIVE-STOCK.—The public sale of live-stock belonging to the estate of the late WILLIAM STICKNEY, took place at Westminster, Vt., on the 9th of October. The number of people in attendance was estimated at one thousand, and the animals brought satisfactory prices. One Devon heifer, two years old, brought $150, another $160, and several cows upwards of $100 each. The Devon bull imported by Mr. STICKNEY, brought $270. The Suffolk, Middlesex, and Essex pigs sold well. One Suffolk sow and pigs brought over $100, and one sow alone $80.

AGRICULTURAL EXHIBITIONS.—These annual jubilees of our rural population, have generally been of an unusually interesting character, the present season, and have been attended by large crowds. We have received accounts of many exhibitions, for which we return our thanks, but are obliged, for want of space, to forego detailed notices.

HEAVY STEERS.—Col. E. LONG, of Cambridge, N. Y., informs us that he has a pair of steers, two years old last April, which weighed alive on the 12th of October, 3,420 lbs. They were intended for exhibition at the State Fair, but by an accident were prevented from arriving in time.

NEW BOOKS.—C. M. SAXTON, 123 Fulton-street, New-York, has just issued a handsome edition of Prof. JOHNSTON's Lectures before the N. Y. State Ag. Society, delivered at the Capitol last winter. Mr. S. has also in press a new edition of Prof. J.'s Agricultural Chemistry.

LONG AND ROTTEN MANURES.—Were we not guided by experience, perhaps we should be led to imagine there would not only be a saving of the ammoniacal salts, phosphates, &c., by applying manure fresh to the soil, but that all soils would be equally benefitted by being thus treated. Not so. The chemical action of the manure will be equally efficacious on light and heavy soils, but this is more than counteracted by the injurious mechanical action. Whilst unfermented dung will prove most beneficial to our clays, half rotten dung will be most efficacious to soils of a medium texture, and rotten dung to our light ones. Decomposed farm-yard manure is no better adapted for every soil than one man is adapted for every profession. *Ag. Gaz.*

Merino Sheep for Sale.

500 MERINO LAMBS for sale, in lots of 50 or more, at $1,50 per head. 800 good sheep to slaughter.

The undersigned will also sell 200 pure bred Merino Ewes, of good age, at from 8 to 10 dollars per head. Cash down, or good credit, one year. S. W. JEWETT.

Middlebury, Vt., Oct. 18, 1850.—1t.*

Cow Milkers.

A GENUINE ARTICLE—small, compact, and cheap—may be sent by mail or carried in a Pocket Wallet. Price $2,50. For sale, by EMERY & CO.

Nov. 1—1t 369 and 371 Broadway, Albany, N. Y.

A New Book for the
Practical Farmer.

LECTURES on the GENERAL RELATIONS which SCIENCE bears to PRACTICAL AGRICULTURE, delivered before the New York State Agricultural Society, by JAMES F. W. JOHNSTON, F. R. S. S. L. and E., Prof. of Agricultural Chemistry in Durham University, Eng., author of Lectures on "Agricultural Chemistry," etc. etc., with notes and additions by an American Farmer. Illustrated by a Portrait of the author—price 75cts in cloth binding, 50cts in paper (mail edition.) C. M. SAXTON,
Agricultural Book Publisher, 120 Fulton st., New-York.

C. M. Saxton *has in press* a new edition of Prof. Johnston's Lectures on the application of Chemistry and Geology to Agriculture—Price $1,25 colth, *mail edition* $1.

Also Houre on the cultivation of the Grape vine with full directions for its management—Price 50cts cloth, mail edition 37½.

Nov. 1—1t.

Sale of Merino Sheep.

I WILL sell at my Farm, on Wednesday, the 20th day of November, at 1 o'clock, P. M., 40 Merino Rams, and 100 Merino Ewes.

These Sheep I have bred from Sheep I purchased of J. N. Blakesly, Esq., of Watertown, Conn. A history of his sheep can be found in the Cultivator for 1844, at page 238.

At my last shearing I took off 180 fleeces, 100 of them from breeding Ewes, 60 from shearlings, and the balance from Rams and Wethers. They averaged 4 3-4 lbs.

For the quality of the Wool, I give the copy of a letter from H. G. Ellsworth, Esq. Agent of Woolen Manufacturing Co. in this city, to the Editor of the Cultivator.

OFFICE OF THE AUBURN WOOLEN COMPANY,
Auburn, N. Y., Oct. 8, 1850.

EDITOR CULTIVATOR, DEAR SIR:—Learning that Col. J. M. Sherwood, of this city, has proposed to sell a portion of his Merino Sheep, I take pleasure in recommending them to the attention of such persons as may wish to improve their stock of this kind. I have manufactured, in the Mills of this Company, the wool taken from this flock, during the last three years, and find *it grades higher and more even, spins better, and is, on the whole, superior to any lot of Merino wool I have met with.* H. G. ELLSWORTH, Agent.

The Rams will be put up at ten dollars each. The Ewes will be sold in lots of five, and will be put up at *five dollars for each Ewe.* If these prices are not offered, they will remain mine.

Terms cash at the sale. J. M. SHERWOOD.

Auburn, N. Y., October 10th, 1850—1t.

Isabella Grape Vines,

OF proper age for forming vineyards, propagated from and containing all the good qualities which the most improved cultivation for over twelve years has conferred on the Vineyards at Croton Point, are offered to the public. Those who may purchase will receive such instructions as will enable them to cultivate the grape with entire success, (provided their locality is not too far north.) All communications, post paid, addressed to R. T. UNDERHILL, M. D. Grape Depot, 379 Broadway corner of White st., New York, will receive prompt attention.

He feels quite confident that he has so far meliorated the character and habits of the grape vines in his vineyards and nurseries by improved cultivation, pruning, &c., that they will generally ripen well, and produce good fruit when planted in most of the Northern and all the Western, Middle and Southern States.

Nov. 1, 1850—2t.

$500 TO $2000 A YEAR.

FIVE HUNDRED AGENTS WANTED

In all the States of the Union,

Including California,

TO CANVASS FOR THE FOLLOWING important and valuable works, which are sold by subscription.

We have now about two hundred Agents in the field, many of them clearing *from two to eight dollars per day*. It will be seen that they are all of a very popular and desirable kind, and calculated to please almost every taste. For further particulars apply (post paid) to the publishers,

DERBY & MILLER,
Auburn, N. Y.

"HOW A FARMER MAY BECOME RICH."

Blake's Farmer's Every Day Book,

Or how a Farmer can become rich—being sketches of Life in the Country; with the Popular Elements of practical and Theoretical Agriculture, and twelve hundred Laconics and Apothegms relating to Morals, Regime and general Literature; also 500 receipts, on health, Cookery and domestic economy; with ten fine illustrations, representing the various scenes attendant upon Farming, etc., By John L. Blake, D. D., author of "Biographical Dictionary," "Family Encyclopedia," &c.

The publishers respectfully announce that they have undertaken the publication of this large and beautiful work, with a view to supply a *desideratum* that has long been felt—a book for *every Farmer's Library*—believing that the venerable author has produced a work that will be worth its weight in gold to every Farmer's family, that thoroughly peruse it. It is proper to state that Dr. Blake is a *practical farmer*, and has reclaimed a sterile and worn out piece of land into a valuable and productive farm—which experience, with his well known qualifications as an author, peculiarly fit him to prepare a book for farmers.

The work contains 654 pages, large octavo, with a motto surrounding each page. It is printed on fine paper, and bound in substantial imitation Turkey Morocco, gilt back. Invariable retail price, $3.00.

Frost's Pictorial History of California.

The History of the State of California, from the earliest period of her conquest by the Spaniards, to her acquisition by the United States; with an account of the discovery of the immense Gold Mines, and the quantity of Gold already obtained; the enormous increase of population; a description of the Mineral and Agricultural resources of the country; with adventures and travels among the mines. Also, advice to Emigrants, as to the most desirable *routes* thither. To which is added the Constitution of the State of California, with numerous illustrations, and a Map of California, and the gold mines, in one octavo volume, 500 pages; bound in same style as Mexican War. Retail price, $2.50.

"I am prepared—I have endeavored to do my duty."

The Life of Zachary Taylor,

Late President of the United States, including the closing scenes of his life and death, by H. Montgomery—embellished with a steel portrait and 15 illustrations, in one elegant octavo vol., 463 pages, well printed on fine paper, and bound in substantial morocco, gilt back.

"The lightnings may flash, the thunders may rattle,
He hears not, he heeds not, he's free from all pain,
He sleeps his last sleep, he has fought his last battle,
No sound can awake him to glory again."

More than 20,000 copies of the above work have been sold by us, and the demand is unabated. It is allowed by critics, to be the most complete and authentic copy of any of the works purporting to be a Life of the Great Man of the Age. Retail price $2,00.

Drain Tile Works,

63 Jay Street, North of Salamander Works, Albany.

THE subscriber is now manufacturing and prepared to fill orders for Horse Shoe, Sole, Round and Collar Drain Tile, of various sizes, from one to four inches in width and rise. The tile is cut sixteen inches in length, and will be of a superior quality. The price will vary according to the size and shape, from $10 to $16 per thousand. Specimens of the article with the prices will soon be distributed to all the agricultural stores in the State. Presidents of county societies adjoining the river and canals, will please send their address with directions to whom a box containing the different sizes of Tile will be forwarded free of charge.

July 1, 1850—tf. A. S. BABCOCK.

Agricultural Warehouse and Seed Store.

No. 197 Water street, (near Fulton,) New-York.

THE subscribers would respectfully invite the attention of planters and dealers in Agricultural and Horticultural Implements, Garden and Field Seeds, &c., &c., to their large and varied assortment of Garden and Field tools, &c., which they are selling at the very lowest rates that they can be procured in the United States. Persons living at a distance can obtain an "illustrated" Catalogue, containing a list of prices, on application by letter, post-paid. Those ordering from us may depend upon their orders being promptly filled.

May 1, 1850—tf. JOHN MAYHER & CO.,

Agricultural and Horticultural Implements, and

Field and Garden Seeds.

UPWARDS of *one hundred* different kinds of Plows, and a corresponding variety of all other Implements for the Farmer, Planter and Gardener; embracing the largest and most complete assortment to be found in the United States. Also, Field and Garden Seeds, a large and varied assortment. A. B. ALLEN & CO.,

August 1, 1850.—tf. 189 & 191 Water St., New-York.

White Dorkings.

THE subscriber has on hand a few choice White Dorking fowls which he will sell at fair prices—bred by himself. As far as his knowledge goes, this variety of the Dorkings is more sought after, both in England and in this country, on account of their color. Price, $5 per pair. L. DURAND.

Derby, Ct., Oct. 1, 1850—2t.*

Fruit and Ornamental Trees.

THE subscribers would beg leave to give notice to dealers and others purchasing Pear trees, that their stock is remarkably well grown this season, and will be very strong and fine for the fall sales, and is as extensive a collection of saleable trees as can be found at any other nursery in the county. The collection grown on quince stock is also very fine.

The stock of Apple trees will also be very large this fall, in lots to suit purchasers.

PLUMS—A general assortment of most of the leading kinds.

CHERRIES, APRICOTS, PEACHES, GRAPE VINES, GOOSEBERRIES, CURRANTS, with other small Fruits, at the lowest market prices.

ORNAMENTAL TREES, being also grown extensively, can be furnished by the hundred at very reasonable rates—European Linden, Mountain Ash, Scotch Elms, English Elms, Horse Chestnuts, with a good collection of ROSES, &c. Catalogues will be forwarded to all applicants. WILSON, THORBURN & TELLER,

Oct. 1, 1850—2t Nurserymen, 492 Broadway, Albany.

Choice Fruit Trees.

Rochester Commercial Nursery. Established 1830.

THE subscribers offer for sale, this autumn and the coming, one of the largest stocks of fruit trees in this state; carefully propagated and grown by ourselves, and warranted correctly named.

It has been our constant aim to cultivate none but the good varieties, leaving to others the long list of useless trash.

We sell very much at wholesale, and have furnished as many as 5,000 Apple trees for a single orchard, and 3,000 dwarf Pears.

Persons wishing to purchase in large or small quantities, will find it to their interest to communicate with us.

BISSELL & HOOKER,

Oct. 1—2t. Rochester N. Y.

Ayrshire Bull for Sale.

THE two-year-old Ayrshire bull, "Governor 3d," out of "Lady Rose," by "Governor 2d," both prize animals in Scotland, selected for and imported by R. S. GRISWOLD, of Hartford, Conn, in 1846. The Bull may be seen at the farm of Mr. PRENTICE, Mount Hope, near Albany Price $100. Oct. 1, 1850.

Postponed Sale of full bred Short-horns and improved Dairy Stock.

OWING to affliction in my family, I have postponed the annual sale which was to take place in October, 1850, until the 28th day of June, 1851.

I also decline selling any stock by private sale, so as to offer the public, at auction, all the animals I have to part with, without having any previously selected from the herd, and all animals offered will be sold without reserve.

My new importations of Short-horns, Devons, South Down Sheep and Hogs, will arrive during the fall.

Timely Catalogues, with full descriptions of each animal, will be published in the principal Agricultural journals.

Mount Fordham, Oct. 1st, 1850. L. G. MORRIS.

The Farmers' Encyclopedia,

BY C. W. JOHNSON. Adapted to the United States, by G. EMERSON, Philadelphia, 1850. In one large octavo volume, 1173 pages, containing the latest discoveries and improvements, in Agriculture, with numerous plates of Live Stock, Farming Implements, &c.

"We are fully convinced that such an amount of valuable knowledge for farmers can be found in no other work in so cheap and convenient a form. In fact, no farmer who pretends to be well informed in his profession should be without this book."—*New Genesee Farmer.*

"An excellent work, fit to be distributed in premiums by Agricultural Societies. How much better, and in better taste, than the amount of its cost in money."—*J. S. Skinner.*

Sold by L. TUCKER, Albany; A. HART, Philadelphia; DERBY & Co., Buffalo; W. D. TICKNOR & Co., Boston; and the principal booksellers in the Union. Price $4. (Cost of the imported work in 1 vol. *without any plates*, $14.) July 1—tf.

Transactions of the N. Y. State Ag. Society.

TRANSACTIONS of the New-York State Agricultural Society, from 1841 to 1849, eight vols., price $8, for sale at the office of THE CULTIVATOR.

A New Hardy Climber.

THE new and beautiful CLIMBER, Calestigia pubescens, recently introduced from China, by Mr. Fortune, proves perfectly hardy in New England, having stood in the grounds here the past winter, without the least protection. Trained to a single pillar, say 10 feet in height, it is a very striking and beautiful object from the middle of June till cold weather, during which time it is covered with a profusion of its large double flowers, of a delicate rose color. It is very ornamental planted in patches like the verbenas; makes an admirable screen, and is very effective in young plantations, belts, or shrubberies, trailing prettily on the surface, and running up among the lower branches of trees in a very picturesque manner. It is, therefore, particularly suited for ornamenting cemeteries and public gardens. Its culture is very simple, and it thrives in any good garden soil. When required in considerable quantities, it is best to start it under glass in February or March, but the tubers may also be planted in the open ground in May. The subscriber will send to order, by mail or express, October 20th, tubers sufficient for 100 plants, at $5.00; 50 plants, $3.00; with directions for propagation and cu'ture.

Strong plants in pots, in April, $1 per pair. B. M. WATSON.

Old Colony Nurseries, Plymouth, Mass., Oct., 1, 1850—tf

Pear Seedlings.

THE undersigned offers for sale, 100,000 pear seedlings, from $8.00 to $20.00 per 1,000, and a great variety of dwarf and free stocks for nurseries at low prices—fruit and ornamental; also

Deodar Cedars, 1 to 3 ft., $1 to $3; Araucaria imbricata, $1. Cedar of Lebanon, $1; Thuya filiformis, $1.50; Lonicera Ledebourii, 50 cents; Spiræa Reevsii, 50 cents; —— prunifolia fl. pleno, 50 cents; Japan Pear, double crimson, 50 cts; Ribes albidum, 50 cts; Spiræa Lindleyana, 50 cents. New Lilacs, fine Double Hawthorns, and a full assortment of ornamental plants, of which a priced list will be sent, post paid, to order.

APPLES—A few hundred extra Dwarf Pyramidal Apples, of the best sorts, in a bearing state.

RHUBARB—Ten thousand Willmott's Early, and Myatt's Victoria Rhubarb.

IVES' WASHINGTON SEEDLING PLUM—(Originated by J. M. Ives, Esq., of Salem, Mass.,) is pronounced by the best judges equal to any American Plum yet produced. It is of great size and beauty, and of delicious flavor. $2.00

Local Fruits.—The Watson Pear, an excellent early pear, (August 20,) handsome, and of good size, of a peculiar and delicious flavor; an old favorite here, where it has fruited above sixty years. The Horseblock or Manonet, Sassafras or Spur Sweet, Holnes and Hightop Apples, are all excellent fruit, descriptions of which may be found in the leading Horticultural Magazines for the years 1849–50. One of each of the above, $2.00. B. M. WATSON.

Old Colony Nurseries, Plymouth, Mass., Oct. 1, 1850—tf.

South Down Sheep.

THE subscriber offers for sale, this season, several pure bred South Down Rams, varying in age from lambs to 4 years old. Also several Ewes, from one year to four years old.

The Lambs and Yearlings of this flock, are from an imported Ram from the Duke of Richmond's celebrated flock.

Applications for the above Sheep may be addressed to the subscriber in this city. JNO. McD. McINTYRE.

Albany, August 12, 1850—3t.

Unrivaled Improvement in Water Wheels for Mill-Owners.

RECENT improvements in the French Turbine and Scotch Mortar Water Wheels, exceeding all others, even the most perfect Overshot Wheel, by a great percentage, has been patented by Mr. Henry Van Dewater. It has been fully tested, and found *far* in advance of all other wheels, both in power and economy, or quantity of water required. Its superiority is established in the following points: 1st. It gives greater percentage of the water. 2d. Is not affected by back-water. 3d. Is not obstructed by ice. 4th. Wastes no water. 5th. Is more durable. 6th. Requires less room. 7th. It is less variable in its motion when performing more or less labor, with the same supply of water.

The quantity of water required under different heads and falls, for six and a half horse power, say from 5 feet to 28 feet fall, first ft in ft in ft in ft in ft in ft in ft in ft in ft in ft in ft in 5-114, 6-88, 7-68, 8-57, 9-48, 10-44, 11-38, 12-31, 13-31, 14-29, 15-26, ft in ft in ft in ft in ft in ft in ft in ft in ft in ft in ft in 16-25, 17-23, 18-21, 19-20, 20-19, 21-18, 22-17, 23-16, 24 15, 25-14, ft in ft in ft in 26-11, 27-10, 28-9. All who may wish to improve their mills or factories, by the use of the above wheels, and will send us a statement of head and fall of water, and the amount of horse power required to drive the machinery they use, will receive immediate attention.

☞ This wheel is capable of driving, according to the quantity water, and as the head and fall may be in height, from 6 horse-power to 250 horse-power.

Mr. Jagger, is a practical and experienced mill-wright, and considers this the best Water Wheel that has ever been offered to the public.

We have a large assortment of Machinery patterns, that have been collecting more than fifty years, and are ready at all times to furnish Castings, fitted or not, at short notice and on fair terms.

JAGGER, TREADWELL & PERRY,
Eagle Foundry and Machinery Works,
Oct. 1—6t. No. 110 Beaver street, Albany, N. Y.

Fruit and Ornamental Trees, &c.

THE subscriber cultivates at his Nurseries, and has for sale at his residence, *Eustis-street*, Roxbury, Mass., all the choice varieties of the Pear, Apple, Plum, Cherry, Peach, and other Fruit Trees, Raspberries, Gooseberries, Currants, Grape Vines, Strawberries, Asparagus Roots, etc., etc., etc.

Also several thousand Pear Trees on the Quince—one, two, three, four and five years from the bud.

Particular attention paid to the cultivation of the Pear.

Persons wishing extra sized trees, *or trees on Quince stock in a bearing state*, will please call at the Nurseries and make their own selection.

30,000 Buckthorn Plants.

ORNAMENTAL TREES, Shrubs and Roses, Herbaceous Plants, Pæonies, &c.

The whole for sale at the lowest market price. Catalogues gratis to post-paid applicants. SAMUEL WALKER,
Roxbury, Sept. 1—3t. *Roxbury, Mass.*

Fruit and Ornamental Trees,

at the Nursery of J. J. THOMAS, *Macedon, N. Y.*

MOST of the Trees are of large, handsome, and thrifty growth, and they embrace careful selections of the best sorts of Apples, Peaches, Pears, Cherries, Apricots, &c., with the smaller fruits.

When purchasers desire, selections will be made by the proprietor, so as to afford a regular succession of the best varieties throughout the season; and all may be relied on as strictly true to their names, *the proprietor having for the past fifteen years invariably adhered to the rule of selling none but* THOROUGHLY PROVED *sorts.*

A carefully assorted collection of hardy Ornamental Trees, Shrubs, and Herbaceous Perennial Plants, furnished at moderate prices.

Trees for canal and railroad well packed in bundles, enclosed in strong mats, with roots mudded and encased in wet moss, so as to preclude all danger of injury.

All communications, *post-paid*, to be directed Macedon, Wayne Co., N. Y. Sept. 1—3t.

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Thorp, Smith & Hanchett, Proprietors, Syracuse, N. Y.

THESE Nurseries are now most abundantly stocked with the various kinds of fruit trees suitable to this climate, to which the proprietors feel much satisfaction in calling the attention of cultivators and dealers. The peculiarly favorable season hath given to their trees a vigor of body, a hale outstretching of the limbs, and a beauty of form, which do render it a grateful entertainment for the eyes to dwell upon them. Trees, superior in those particulars, have rarely been offered to purchasers.

Their nurseries embrace all of the most approved varieties, old or new, of the various kinds of

FRUIT TREES—From which customers can be supplied in quantities of from 10, to 10,000, as excellent in quality, and as reasonable in terms, as can be found at any other like establishment.

ORNAMENTAL TREES—Splendid in size and form, of the *Horse Chestnut, Mountain Ash, Balsam Fir, Ailanthus,* and various others, may be had, largely or otherwise.

BUCKTHORN FOR HEDGES—One and two years old, very stout; Snowballs, Michigan Roses, Grape roots, Quince Trees, Currants, Gooseberries, &c., &c.; all, or any of which, will be parted with at most reasonable prices.

Catalogues, as usual, supplied to *post-paying* applicants.

Syracuse, 1st Oct., 1850—2t.

Apple Trees for Orchards.

MANY thousand fine Trees, mostly 7 to 8 feet high, *propagated in all cases from thoroughly proved or bearing trees*, for sale at the nursery of J. J. THOMAS, Macedon, Wayne Co., N. Y.

They embrace the best standard varieties, with nearly all the valuable new sorts; among them are Early Harvest, Sine Qua Non, Sweet Bough, Early Joe, Summer Sweet Paradise, Autumn Strawberry, Gravenstein, Dutch Mignonne, Rambo, Fall Pippin, Yellow Bellflower, Rhode Island Greening, Esopus Spitzenburgh, Northern Spy, Swaar, &c., &c.

Price, varying with selections, from *sixteen* to *eighteen* dollars per hundred—a first rate selection of summer, autumn, and winter fruit, of fifteen to thirty varieties, if made by the proprietor, furnished at *sixteen dollars* per hundred, or *seventeen* if well packed in matted bundles, and delivered at canal or railway. All orders to be accompanied with remittances. Sept. 1—3t.

The American Live Stock Insurance Company,

At Vincennes, Ind.

CHARTER unlimited. Granted January 2, 1850. ☞Capital $50,000!☜ For the Insurance of *HORSES, MULES, PRIZE BULLS, SHEEP AND CATTLE*, of every description, against the combined risks of *Fire, Water, Accidents and Disease.*

Losses paid in 30 days after proof of death.

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Aug. 1, 1850—1yr. B. P. JOHNSON, Agent, Albany.

Colman's European Agriculture.

EUROPEAN AGRICULTURE, from personal observation, by HENRY COLMAN of Massachusetts. Two large octavo vols.—price, neatly bound, the same as published in Nos., $5. For sale at the office of THE CULTIVATOR.

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School of Applied Chemistry,

Yale College, New Haven, Conn.

JOHN P. NORTON, Prof. of Scientific Agriculture.
HENRY WURTZ, First Assistant.

STUDENTS are received in this Laboratory as a special class distinct from the other college departments, and instruction is given in all branches of Chemistry, both organic and inorganic, general and special.

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A Course of Lectures upon *Scientific Agriculture*, by Prof. Norton, will commence about the middle of January, and continue two and a half months. This course is intended to present a plain and intelligible view of the connections of science with agriculture, which may be understood by any farmer. Mr. Wurtz proposes to lecture on some points of Applied Chemistry during the summer term.

The lectures of Prof. Silliman on Geology and Mineralogy, and those of Prof. Olmsted, on Natural Philosophy, Astronomy and Meteorology; also the college libraries and cabinets, are accessible to the students.

For information as to terms, &c., apply to Prof. NORTON,
Oct. 9, 1850—4t *New-Haven.*

Trees! Trees!! Trees!!!

FOR SALE, at Mount Ida Nursery, Troy, N. Y., a choice variety of Fruit Trees, comprising Apples, Pears, Peaches, Plums and Cherries, of the most approved kinds—the greater part of them worked from bearing trees, and all of them by the subscriber—therefore he can recommend them with confidence. He would also say to those that have not had the experience, that trees brought from the South (if they do live) do not grow as thrifty for a number of years, as those raised in a Northern latitude, which many persons can prove from experience. He also pays particular attention to the transplanting of his trees so as to have them well rooted.

Also, a good variety of Shade Trees, consisting of Scotch Elm, Sycamore, Linden, Horse Chestnut, Mountain Ash, Evergreen Privet for Hedges, China and Hardy Roses, &c., &c.

Catalogues and other information can be had of the Nurseryman,
Nov. 1, 1850—1t* JOSEPH CALDWELL.

Choice Fruit Trees.

THE SUBSCRIBER would announce to the public that his stock of Apple Trees especially, this fall, is unusually large and fine, having a full stock of Baldwin, Rhode Island Greening, Northern Spy, Swaar, Boston Russet, Ladies Sweet, Yellow Harvest, &c., 6 to 9 feet and handsome, with all the leading as well as new choice and rare varieties, with a general assortment of Plums, Pears, Cherries, Apricots, Nectarines, Peaches, Quinces, Gooseberries, Grape vines and Currants, with Red Antwerp, Franconia and Fastolff Raspberries at $6 to $8 per 100. Strawberries of the best varieties assorted at $5 per 1000.

CHAS. HAMILTON.
Cornwall, Oct. 1850—1t

Valuable Farm for Sale.

THE subscriber offers for sale the farm on which he resides situated in Wayne county, N. Y., 1¾ miles east of the thriving village of Palmyra. The Lyons and Rochester turnpike passes in front of the house, which is a good two storied frame building 35 feet by 25, with cellar below, and kitchen, woodshed, &c. attached. It is pleasantly situated on the north side of and overlooking the valley of the Erie Canal, surrounded by shrubs and ornamental trees. There is a choice collection of the best varieties of cultivated fruit, consisting of Apple, Peach, Cherry and Plum orchards, also Apricots, Almonds, Nectarines, Filberts, Grapes, &c. The farm contains 100 acres, about 30 of which are between the house and Mud creek well adapted to meadow and pasture. The plough land is a good gravelly loam excellent for wheat, corn, barley, &c, in a high state of cultivation,—of wood there is about 17 acres well timbered. It has about 200 rods of thorn hedge, with abundance of durable fencing materials. The farm is well located as to markets, mills, schools, situation is healthy, water good and convenient, so arranged as to supply almost every lot. Out-buildings convenient and good. Also for sale three young draught Stallions, 4 years old, sired by his imported draught horse "Samson." (For description of whose stock, see "Albany Cultivator" of Sept. 1849, page 289.) Also a fine large breeding mare, of same stock, with a foal by her side "by Nottingham's and Allen's Samson," (who took first premium as the best draught horse at the State Fair of 1849.) Also a large powerfully built two year old stud colt, from same mare, by the imported draught horse "Honest Tom." Inquiry may be made of R. B. Howland, Union Springs, Cayuga county. N. Y., or J. J. Thomas, Macedon, Wayne county, N. Y. For particulars address the subscriber. JOHN ROBINSON

Palmyra, Wayne county, N. Y., 9 month 26, 1850—1t.*

$8,000 ACRES LONG ISLAND

Land for Sale,

At Lake Road.

THE UNDERSIGNED IS, AND HAS BEEN for several years, engaged in the improvement and cultivation of the wild lands of Long Island. The fact being now fully established, beyond any doubt, that the land in the middle parts of the Island, along the borders of the L. I. Railroad, is as good and productive, when cultivated in the same manner, as any other part of Long Island. 8,000 acres are now offered for sale, in parcels to suit purchasers, from 10 acres, to 100, or 1,000, at a very low price, and on favorable terms. This tract is near the geographical centre of the Island, being about equi-distant from Long Island Sound, and the Great South Bay, (the Island being about 13 miles wide there,) and 48 miles from New-York.

There are many highly cultivated farms in the immediate vicinity, on the North and South side of this land—having been settled and cultivated more than 150 years. It is well watered, being bounded on the north by the famous Ronkonkama Lake—has also a large and never failing stream running through it. The lake and stream are full of fish—perch in the lake, and trout, in great abundance, and of large size, in the stream. The country abounds in game, deer, and wild fowl.

The climate is mild and perfectly healthy, the surface is smooth, gently undulating, with an inclination to the South of about 15 feet to the mile—the soil—free from stone, easy and pleasant to cultivate—is a loam, large portions of which may be called a heavy loam, or it is of sufficient tenacity to make sun-burnt brick, right out of the surface—is from 18 inches to 3 and 5 feet deep, and is susceptible of the highest degree of cultivation. The railroad passes through this tract, affording easy and constant communication with the Brooklyn and New York markets, where the highest price in cash, can always be had for every article that the farmer and gardener can produce. To capitalists, an excellent opportunity is here presented to obtain a large tract of valuable land at a low price, possessing all the advantages for settlement of a new country, without any of the privations, but with all the privileges and comforts of an old. Apply to A. B. Allen, Esq., Editor of the *American Agriculturist*, 187 Water st.; to Messrs. Starr & Alburtis, Editors of the Farmer and Mechanic, 122 Nassau st.; to Messrs. Dewey & Wood, 82 Nassau-st., New-York, or to

E. F. PECK,
306 State st., Brooklyn, L. I.

☞ Lake Road is an important and central depot on the Railroad—there are large buildings and a settlement there. Oct. 1—2t.

THE CULTIVATOR

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